BUILDING STANDARDS COMMISSION
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

April 27, 2011

Daniel P. Madrigal, Fire Chief
Fire Department
City of Redondo Beach
401 South Broadway
Redondo Beach, CA 90277

Dear Mr. Madrigal:

This letter is to acknowledge receipt on April 25, 2011 of the City of Redondo Beach submittal pertaining to Ordinance No. 3064-10 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

redondo BEACH

Fire Department

401 South Broadway
Redondo Beach, California 90277
www.redondo.org

tel 310 318-0663
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CERTIFIED MAIL

April 20, 2011

California Building Standards Commission
2525 Natomas Park Drive., Ste. 130
Sacramento, CA 95833

RE: REDONDO BEACH ORDINANCE NUMBER 3064-10 ADOPTING THE 2010 EDITION OF THE CALIFORNIA FIRE CODE AND AMENDMENTS INCLUDING THE FINDINGS OF FACT

Pursuant to Section(s) 18941.5 and 17958.7 of the California Health and Safety Code, the enclosed documents are submitted as the Findings of Fact for the City of Redondo Beach. Redondo Beach City Ordinance Number 3064-10 will be effective beginning January 1, 2011. Under this ordinance, specific amendments have been established, which are more restrictive than those sections mandated by the State of California (State Building Standards Code, State Housing, and Community Development Code) commonly referred to as Title 24 and 25 of the California Code of Regulations.

The adopted and amended California Fire Code published by the International Code Council and the Western Fire Chief's Association, has been recognized by the City of Redondo Beach as addressing the City's fire problem in a manner which assures a reasonable degree of fire and life safety for the City's residents and visitors.

The City of Redondo Beach has previously submitted Findings of Fact as a result of prior Fire Code adoptions. In these amendments, there have been some code section numbering changes or title changes; however, there have not been any substantive changes to these amendments that would change the nature of the code. Therefore, this Findings of Fact is submitted, along with a summary of existing Redondo Beach Municipal Code Amendments.

Under provisions of Section 17958.7 of the California Health and Safety Code, local amendments shall be based on climate, geographical, and topographical conditions. The Findings of Fact contained herein details each of these situations and shall present the

local situation which either singularly or in combination causes the established amendments to be adopted.

The following Findings of Fact have been previously submitted for our existing amendments:

GEOGRAPHIC
The most significant geographical issue affecting the fire concern in this community is the potential of earthquakes. The City sits astride several major earthquake faults. The occurrence of a major earthquake could easily result in a major fire beyond the capability of local fire defenses.

CLIMATIC
The most climatic conditions affecting fire defenses are: 1) Santa Ana winds which create a conflagration potential. 2) Pacific storms which create flooding and high wind potential.

TOPOGRAPHICAL
The major topographical features effecting fire safety are the increasing structural and population densities. These increased densities result in increased traffic which slows emergency vehicle response and greater building densities which create a greater fuel loading and fire potential. Additionally, many property lots in the community are of a depth that requires excessive hose lays to reach all portions of a building and because changes in elevation around a building reduce access, these conditions necessitate additional standpipes inside a building to quickly apply water.

The conditions delineated above combined with the City's Master Plan of Fire Protection development in this community have identified an urgent need for increased built-in fire safety devices. The enclosed Ordinance Number **3064-10** is the result.

Sincerely,

REDONDO BEACH FIRE DEPARTMENT

Daniel P. Madrigal
Fire Chief

DPM/

ENCLOSURES:

Exhibit A – Administrative Report; Adoption of the 2010 California Fire Code.
Exhibit B – Ordinance #3064-10
Exhibit C – City Council Agenda Noticing Public Comment & Adoption
Exhibit D – Existing Municipal Code Amendments; Title 3, Public Safety, Sub-Chapter 4-Fire Prevention and Title 9, Chapter 1-Building Code
Exhibit E – Fire Department Code Amendments & Specifications

c: Kate Dargan, California State Fire Marshal's Office
Administrative File, Redondo Beach Fire Department

Administrative Report

Council Action Date: December 7, 2010

To: MAYOR AND CITY COUNCIL

From: DANIEL P. MADRIGAL, FIRE CHIEF

STEVE HUANG, CITY ENGINEER/CHIEF BUILDING OFFICIAL

Subject: ADOPTION OF THE PROPOSED 2010 CALIFORNIA FIRE CODE, THE 2010 TITLE 24 CALIFORNIA CODE OF REGULATIONS, AND MODIFICATIONS TO THE CITY OF REDONDO BEACH MUNICIPAL CODE

RECOMMENDATION

1. Open the Public Hearing on the 2010 Title 24 California Building Codes and the Redondo Beach Municipal Code amendments and accept all public testimony; and

2. Close the Public Hearing and adopt the following Ordinance by title:

   AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, AMENDING CERTAIN PROVISIONS OF CHAPTER 4, TITLE 3 AND TITLE 9 OF THE REDONDO BEACH MUNICIPAL CODE, AND ADOPTING THE 2009 INTERNATIONAL FIRE CODE, WHICH INCORPORATES THE 2010 CALIFORNIA AMENDMENTS, THE 2010 TITLE 24 CALIFORNIA CODE OF REGULATIONS PART 1 THE CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 2 THE CALIFORNIA BUILDING CODE, PART 2.5 THE CALIFORNIA RESIDENTIAL CODE, PART 3 THE CALIFORNIA ELECTRICAL CODE, PART 4 THE CALIFORNIA MECHANICAL CODE, PART 5 THE CALIFORNIA PLUMBING CODE, PART 6 THE CALIFORNIA ENERGY CODE, PART 8 THE CALIFORNIA HISTORICAL BUILDING CODE, PART 9 THE CALIFORNIA FIRE CODE, PART 10 THE CALIFORNIA EXISTING BUILDING CODE, PART 11 THE CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE), PART 12 THE CALIFORNIA REFERENCE STANDARDS CODE, WITH CERTAIN MODIFICATIONS AND CHANGES TO SAID CODES TO REFLECT LOCAL CONDITIONS;

EXECUTIVE SUMMARY

The City's Fire, and Building and Safety Departments have initiated the process of adopting the most recent California State Codes for the purpose of updating and bringing into compliance the City's building and fire regulations. Every three years the City adopts the most current versions of the State Codes.

The California Government Code mandates that the City introduce and open for discussion a Public Hearing prior to the adoption of any State codes.

The 2010 California Fire Code, the 2010 California Building Code, and the 2010 Title 24 California Code of Regulations are the latest model code revisions published by the International Fire Code Institute in conjunction with the Western Fire Chiefs Association and the International Code Council. These editions have been approved and published by the California State Building Standards Commission, and have become recognized as the "California Fire Code and California Building Code." State law also mandates that the most current Fire and Building Code begin being enforced by all California jurisdictions beginning January 1, 2011, pursuant to Section 17922 of the Health and Safety Code.

This tri-annual code adoption cycle does have two major additions. First is the adoption of the 2010 California Residential Code. Second is the 2010 California Green Standards Code (CALGreen). There are changes to the City of Redondo Beach Municipal Code regarding corrections of code section references, administrative codes, fees, and structural amendments.

BACKGROUND

Historically, the City of Redondo Beach has adopted the most recently published edition of the Fire and Building Codes, and has amended certain code sections that apply to the unique characteristics and special hazards within our community. In order to have the new Fire and Building Codes recognized as law, the City Council must officially adopt these Codes by Ordinance prior to January 1, 2011. Therefore, it is imperative that any revisions be addressed and discussed at the time of introduction. Additionally, as required by law, the proposed Fire and Building Codes must be brought before a public hearing after being advertised in a local newspaper. If the Fire and Building Codes are not adopted as such, they will become law by default, possibly losing amendments that were previously in effect.

Adopting the California Fire Code and amendments as proposed by the City's Fire Department would coincide with the adoption of the California Building Code and amendments as proposed by the City's Building and Safety Department. The California Building Code is published by the International Code Council, and is a sister-publication of the California Fire Code. Its function is to coordinate code references between the two publications to prevent conflicting code sections. It is imperative that the City Council adopt these two publications hand-in-hand.

There are no significant code changes contained within the International Fire Code. Minor amendments are proposed for the adoption process. Amendments to the code correct prior code section references, and continue the existing amendments. All previous amendments

shall remain in force, and are identified in Title 3, Chapter 4 of the Redondo Beach Municipal Code. These relate to fireworks, fire alarm systems, and automatic fire protection systems.

There are two major additions to this code adoption. First is the adoption of the California Residential Code which will regulate the construction and remodeling of one- and two- family dwellings, condominiums, and townhouses. This is a prescriptive document for the construction of simple structures without the need for a registered design professional. Second is the adoption of the California Green Building Standards Code (CALGreen). This will be the first mandatory green building code in the nation. Staff is proposing to charge a fee for the enforcement of the required standards to be ten (10) percent of the permit fee. This fee will off-set the added time of plan review and inspection. Staff also proposes an incentive for compliance with the voluntary Tier 1 or Tier 2 requirements. This would be a refund of the fee (5 % for Tier 1 and the full 10% for Tier 2) after the project is completed with the more restrictive requirements.

There are no significant code changes contained within the California Building Code, California Electrical Code, California Plumbing Code, and California Mechanical Code. Again, only minor amendments are proposed for this adoption process. The amendments to these codes correct prior code section references, and continue or delete the existing amendments.

In conjunction with these amendments, the Building and Safety Department is adding language clarifying:

1) The time of plan check expiration from 90 to 180 days.
2) How certificate of occupancies for new commercial projects, tenant improvements, and new homes are issued.
3) The requirement for a registered design professional to stamp and sign the construction documents for all commercial and tenant improvement plans.
4) Add that when projects in plan check expire, the plans may be able to be re-activated and the plan check process continued for 25% of the original fee.
5) The cost of permitting residential remodels to 65% of new construction cost.

All previous amendments shall remain in force, and are identified in Title 9, of the Redondo Beach Municipal Code. The Ordinance was introduced at the November 16, 2010 meeting of the Redondo Beach City Council.

COORDINATION

The California Fire Code and amendments, the California Building Code and amendments have been reviewed and coordinated with the City's Fire, and Building and Safety Departments. All amendments have been reviewed and approved as to form by the City Attorney's Office.

FISCAL IMPACT

The cost for preparing the Fire and Building Code adoption is included within each Department's portion of the adopted 2010-11 Annual Budget, and is part of each Department's annual work program. Although there will be a minor increase in the Building & Engineering Department revenues for the enforcement of the CALGreen Code, those amounts may be subject to refund if there is voluntary compliance with Tier 1 or Tier 2 requirements.

Submitted by:

Daniel P. Madrigal, Fire Chief

Approved for forwarding by:

Office of the City Manager

Steve Huang, City Engineer/Chief Building Official

rrappaport
mcampbell

Attachments:

- Ordinance adopting and amending Title 24 Building Codes
- PowerPoint presentation

ORDINANCE NO. 3064-10

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, AMENDING CERTAIN PROVISIONS OF CHAPTER 4, TITLE 3 AND TITLE 9 OF THE REDONDO BEACH MUNICIPAL CODE, AND ADOPTING THE 2009 INTERNATIONAL FIRE CODE, WHICH INCORPORATES THE 2010 CALIFORNIA AMENDMENTS, THE 2010 TITLE 24 CALIFORNIA CODE OF REGULATIONS PART 1 THE CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 2 THE CALIFORNIA BUILDING CODE, PART 2.5 THE CALIFORNIA RESIDENTIAL CODE, PART 3 THE CALIFORNIA ELECTRICAL CODE, PART 4 THE CALIFORNIA MECHANICAL CODE, PART 5 THE CALIFORNIA PLUMBING CODE, PART 6 THE CALIFORNIA ENERGY CODE, PART 8 THE CALIFORNIA HISTORICAL BUILDING CODE, PART 9 THE CALIFORNIA FIRE CODE, PART 10 THE CALIFORNIA EXISTING BUILDING CODE, PART 11 THE CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE), PART 12 THE CALIFORNIA REFERENCE STANDARDS CODE, WITH CERTAIN MODIFICATIONS AND CHANGES TO SAID CODES TO REFLECT LOCAL CONDITIONS

WHEREAS, adoption of the 2009 International Fire Code, which incorporates the 2010 California Amendments, by the City of Redondo Beach, hereby referred to as the "California Fire Code," is necessary and desirable to provide current regulations for fire prevention; and

WHEREAS, adoption of the 2010 Title 24 California Code of Regulations Part 1 the California Building Standards Administrative Code, Part 2 the California Building Code, Part 2.5 the California Residential Code, Part 3 the California Electrical Code, Part 4 the California Mechanical Code, Part 5 the California Plumbing Code, Part 6 the California Energy Code, Part 8 the California Historical Building Code, Part 9 the California Fire Code, Part 10 the California Existing Building Code, Part 11 the California Green Building Standards Code (CALGreen Code), Part 12 the California Reference Standards Code, by the City of Redondo Beach is necessary and desirable to provide current regulations for the regulation and construction of buildings; and

WHEREAS, it is further desirable to make certain modifications and changes through amendments to said codes to reflect the particular needs and circumstances of the City of Redondo Beach.

NOW, THEREFORE THE CITY COUNCIL OF THE CITY OF REDONDO BEACH HEREBY FINDS AND DETERMINES AS FOLLOWS:

1. Certain modifications and changes to said California Fire Code, 2010 California Building Code, 2010 California Residential Building Code 2010 California Electrical Code, 2010 California Mechanical Code, and 2010 California Plumbing Code 2010 California Green Building Standards Code (CALGreen Code) are reasonable and necessary because of local climatic, geological, or topographical conditions, and to preserve the health, safety, and welfare of the citizens of Redondo Beach as herein after set forth;
2. Many lots in the community are of a depth that require excessive hose lays to reach all portions of a building. Furthermore, changes in elevations around a building reduce

access. These conditions necessitate additional standpipes inside a building to quickly apply water;

3. There is often steep terrain in the community, and the lack of access to all sides of a building and high winds can rapidly spread fire;

All of the foregoing conditions necessitate the amendment of subsection 905.4 (6) of Section 905.4 of Chapter 9, Part IX of the California Fire Code imposing additional standpipe requirements and their locations;

4. The regular and consistent wind from the ocean with its corrosive effect on electrical systems requires the amendment of subsection 907.9.5 Part IX of the California Fire Code relating to the maintenance and testing of fire alarm services; and

5. Certain editorial changes to Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code, which contains the amendments to the 2001 California Fire Code previously adopted by the City of Redondo Beach are needed to clarify the 2006 California Fire Code and City's amendments thereto.

NOW, THEREFOREE, THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. AMENDMENT OF CODE. Section 3-4.101, Article 1, Chapter 4, Title 3, or the Redondo Beach Municipal Code is hereby amended to read as follows:

"Section 3-4.101. California Fire Code adopted.

The California Fire Code 2010 Edition, and Appendices: A, B, C, CC, D, E, F, G, H, I, and J as compiled and published by the International Code Council, one copy of which is on file in the office of the City Clerk, are hereby adopted as the fire code for the City proscribing regulations governing conditions hazardous to life and property from fire or explosion and are hereby referred to and by this reference expressly incorporated in this article and made a part of this article as though set forth in this article at length. Subject to the additions, deletions, and amendments set forth in this article, said California Fire Code and aforementioned appendices are hereby established and adopted, and the same shall be known, designated, and referred to as the "Fire Code" for the City."

SECTION 2. AMENDMENT OF CODE. Section 3-4.107, Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.107. Fire Alarm Systems. Subchapter 907.9.5 of Chapter 9 of Part IX of the California Fire Code as adopted by this article is hereby amended to add subsection 907.9.5 (a) as follows:

Sec. 907.9.5 (a). Annual Fire Alarm Maintenance, Inspection and Testing. Fire alarm systems must be certified by a fire alarm testing agency holding a C-10 (electrical) and C-61 (low voltage) state contractor's licenses in accordance with
NFPA-72. Every owner of a fire alarm system subject to this subsection must provide the City Fire Department with certification issued by said licensed fire alarm testing agency verifying that all components of the fire alarm systems are operative and have been tested according to National Fire Protection Association standards. Fire alarm systems shall be serviced whenever:

1. A false alarm occurs for an unknown reason or reasons;
2. The fire alarm is activated by fire;
3. The system is in "trouble" condition"

SECTION 3. AMENDMENT OF CODE. Section 3-4.107.1 of Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.107.1. NFPA 13D Alarm Notification. Amend Chapter 9 of the California Fire Code to read as follows:

Section 907.2.11.2.3, R-2, R-3, R3.1, R-4, and I-1 occupancy alarm notification with NFPA 13D protection systems:

a. The Fire Sprinkler System shall be equipped with a weather proof Horn/Strobe located at the front of the structure and/or as near as possible to the front, viewable from the addressed street. It power shall be connected on a kitchen refrigerator circuit or a dedicated tamper proof circuit breaker of sufficient amperage capacity.
b. If this circuit is not accessible from outside the structure, an additional tamper and weather proof disconnect switch shall be provided and located near the fire sprinkler riser.
c. Automatic fire sprinkler system flow alarm shall be required in-house meeting the same requirement of notification. No inside notification appliances required when flow alarm is interconnected to a multiple station smoke detection systems."

SECTION 4. AMENDMENT OF CODE. Section 3-4.110 of Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.110. Fire standpipes system. Section 905.4, Chapter 9 of the California Fire Code adopted by this article is hereby amended to add subsection 905.4 (7) as follows:

Sec. (905.4 (7). Other locations. When all portions of a building cannot be reached by means of a normal route of travel with 150 feet of fire hose extended from a fire apparatus parked on a public way or fire access road, or with 100 feet of hose extended from a standpipe as required by this section, additional standpipe connections shall be installed as needed to provide such access. The distances from a hose connection shall be measured along the path of travel. "Alternative materials and methods (Section 104.9) may be allowed under the discretion of the Fire Chief.

SECTION 5. AMENDMENT OF CODE. Section 3-4.111, of Article1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec 3-4.111 Fire extinguishing systems. Section 903 of Chapter 9 of the California Fire Code is hereby amended as follows:

Section 903.2.2 Group B. An automatic sprinkler system shall be provided throughout buildings containing a Group B occupancy where one of the following conditions exists:

1. Where a Group B fire area exceeds 750 square feet;
2. Where a Group B fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.3 Group E. Except as provided for in Sections 903.2.3.1 for a new public school campus and 907.2.3.7 (fire alarm and detection) for modernization of an existing public school campus building(s), an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas when greater than 750 square feet in area, or located more than one story above grade plane, or where the combined area of all fire areas on all floors, including any mezzanines, exceed 750 square feet.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

Section 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. Where a Group F fire area exceeds 750 square feet;
2. Where a Group F fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.4.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F occupancy fire areas that contain woodworking operations in excess of 750 square feet in area which generate finely divided combustible waste or use finely divided combustible materials.

Section 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group I-1.

Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 750 square feet;
2. Where a Group M fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy where one of the following conditions exists:

1. A Group S fire area exceeds 750 square feet;
2. A Group S fire area is located more than one story above grade plane; or
3. The combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings with a fire area containing a repair garage exceeding 750 square feet.
2. Buildings with a repair garage servicing vehicles parked in the basement.

Section 903.2.9.2 Bulk storage of tires. Buildings and structures for the storage of tires shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Section 903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

Section 903.2.8 Group R and Group U. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R and/or Group U fire area.

Exceptions:

1. Detached Group R-3 and/or Group U accessory buildings not exceeding 750 square feet.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not

be utilized in Group R-4.

Section 903.2.18 Existing buildings of all occupancies. In existing buildings, an automatic sprinkler system shall be required throughout the entire building whenever more than a 750 square feet addition and/or an additional story is added to the existing building.

Section 903.3.1.3 NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems in one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress shall be installed throughout in accordance with NFPA 13D."

SECTION 6. AMENDMENT OF CODE. Section 9-1.00 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.00 Adoption of the California Code of Regulations, Title 24, Part 1, California Administrative Code and Part 6, California Energy Code and Part 8, California Historical Building Code and Part 10, California Existing Building Code and Part 12, California Reference Standards Code.

Those certain documents, one copy of which is on file in the office of the City Clerk, being marked and designated as the California Code of Regulations, Title 24, Part 1, California Administrative Code and Part 6, California Energy Code and Part 8, California Historical Building Code and Part 10, California Existing Building Code and Part 12, California Reference Standards Code , be and the same are hereby adopted as the Code of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and/or structures in the City; providing for the issuance of permits and all collection of fees therefore; and providing penalties for violations of such Code; and each and all of the regulations, provisions, penalties, conditions, and terms of such California Code of Regulations, Title 24, Part 1, California Administrative Code and Part 6, California Energy Code and Part 8, California Historical Building Code and Part 10, California Existing Building Code and Part 12, California Reference Standards Code are hereby referred to, adopted, and made a part of this chapter as if fully set forth in this chapter, subject to the additions, deletions, and amendments set forth in this chapter."

SECTION 7. AMENDMENT OF CODE. Section 9-1.01 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.01 Adoption of California Building Code, Part 2, Volume 1 and 2.

Those certain documents, one copy of which is on file in the office of the City Clerk, being marked and designated as the 2010 California Building Code, Part 2, Volume 1 and 2 (Chapter 1 Division II and Chapter 33, and Appendix B, D, F, H, I, J), be and the same are hereby adopted as the Code of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and/or structures in the City; providing for the issuance of permits and all collection of fees therefore; and providing penalties for violations of such Code; and each and all of the regulations, provisions, penalties, conditions, and terms of such " 2010 California Building Code Volumes I and II" (Chapter 1 Division II and Chapter 33, and Appendix B, D, F, H, I, J) are hereby referred to, adopted, and made a part of this chapter as if fully set forth in this chapter, subject to the additions, deletions, and amendments set forth in this chapter."

SECTION 8. AMENDMENT OF CODE. Section 9-1.02 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.02 Permit required.

Section 105.1 of the California Building Code, Chapter 1 Division II is hereby amended as follows:

Section 105.1 Permits Required. Except as specified in Section R105.2 of this Section, no building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate permit for each building or structure has first been obtained from the building official.

For work with a valuation listed at Fifty Thousand and no/100ths ($50,000.00) Dollars or more the permit must be obtained by a contractor licensed in the state of California or for single family dwellings less than two units the permit may be obtained by the owner using licensed sub-contractors.

An Engineering permit is required prior to commencement of sandblasting work. Additionally, applicant must post a refundable cash deposit of Two Hundred and no/100ths ($200.00) Dollars for each single family dwelling. Contractor is required to comply with all the requirements of the National Pollutant Discharge Elimination System (NPDES). The sandblasting must be wet sandblasting, and all the precautionary measures must be taken by the contractor to protect life and property of neighbors, residents and the public. Adjacent property owners must be notified at least two (2) days prior to sandblasting."

Section 105.2 of the California Building Code, Chapter 1 Division II is hereby amended as follows:

Section 105.2 Work Exempt from Permit. Permits shall not be required for the following:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet ($11m^2$),
2. Wood fences not exceeding 6 feet (1829mm) in height including concrete or masonry pilasters unless fence is built on slope and retains earth, and masonry and concrete fences that are not over 5 feet (1524mm) in height unless built on a slope or retaining earth.
3. Oil derricks.
4. Retaining walls which are not over 4 feet (1219mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II, or III-A liquids.
5. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
6. Platforms, decks, walks and driveways not more than 30 inches (762mm) above adjacent grade and not over any basement or story below and are not part an accessible.
7. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3, Occupancy that are

less than 18 inches (457.5 mm) deep, do not exceed 5,000 gallons (18927 L) and are installed entirely above ground.

10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

11. Swings and other playground equipment accessory to detached one- and two-family dwellings.

12. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R- 3 and U Occupancies.

13. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction."

SECTION 9. AMENDMENT OF CODE. Section 9-1.06.1 is hereby added to Chapter 1, Title 9 of the Redondo Beach Municipal Code to read as follows:

"9-1.06.1 Plan submittal.

Section 107.1 of said California Building Code Chapter 1 Division II is hereby amended to read as follows:

Section 107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in two or more sets with each permit application. The construction documents for all new commercial buildings and commercial tenant improvement plans shall be prepared by a registered design professional. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional."

SECTION 10. AMENDMENT OF CODE. Section 9-1.03 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.03 Fees.

Section 109.1 of said California Building Code Chapter 1 Division II (b, c, d,) is hereby amended to read as follows:

Sec. 109.1 Fees.

(b) Permit Fees. The fee for each permit shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach City Municipal Code.

The determination of value or valuation under any of the provisions of this code shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finished work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent

equipment. The determination of value or valuation for residential remodels shall be 65 percent of the new cost of construction.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section 107, of the California Building Code, Chapter 1 Division II a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 109.1, and are in addition to the permit fees.

The Building Official may modify plan review fees and requirements in accordance with Section 109.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

(d) Expiration of Plan Review.

Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter by returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days on written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. Application may be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee at 25 percent of the original plan review fee, if there are no code updates or changes to original plan submittal.

SECTION 11. AMENDMENT OF CODE. Section 9-1.04 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.04 Violations and penalties.

Section 114.4 of said California Building Code Chapter 1 Division II is hereby amended to read as follows:

Sec. 114.4 Violation penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment."

SECTION 12. AMENDMENT OF CODE. Section 9-1.05 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.05 Fire extinguishing systems.

Section 903 of Chapter 9 of said California Building Code is hereby amended

and Section 903 of said California Building is hereby added to read as follows:

Section 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies.

Section 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies.

Section 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies.

Section 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies.

Section 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 750 square feet.

Section 903.2.1.6 Group B. An automatic sprinkler system shall be provided throughout buildings containing a Group B occupancy where one of the following conditions exists:

1. Where a Group B fire area exceeds 750 square feet;
2. Where a Group B fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.3 Group E. Except as provided for in Sections 903.2.2.1 for a new public school campus and 907.2.3.7 (fire alarm and detection) for modernization of an existing public school campus building(s), an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas when greater than 750 square feet in area, or located more than one story above grade plane, or where the combined area of all fire areas on all floors, including any mezzanines, exceed 750 square feet.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

Section 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. Where a Group F fire area exceeds 750 square feet;
2. Where a Group F fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.4.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 750 square feet in area which generate finely divided combustible waste or use finely divided combustible materials.

Section 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group I-1.

Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 750 square feet;
2. Where a Group M fire area is located more than one story above grade plane; or

3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy where one of the following conditions exists:

1. A Group S fire area exceeds 750 square feet;
2. A Group S fire area is located more than one story above grade plane; or
3. The combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings with a fire area containing a repair garage exceeding 750 square feet.
2. Buildings with a repair garage servicing vehicles parked in the basement.

Section 903.2.9.2 Bulk storage of tires. Buildings and structures for the storage of tires shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Section 903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

Section 903.2.8 Group R and Group U. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R and/or Group U fire area.

Exceptions:

1. Detached Group R-3 and/or Group U accessory buildings not exceeding 750 square feet.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

SECTION 13. AMENDMENT OF CODE. The following Section 9-1.06.1 is hereby added to Chapter 1, Title 9 of the Redondo Beach Municipal Code to read as follows:

"9-1.06.1 Certificate of Occupancy

Section 111.1 of Chapter 1, Division II of the California Building Code is herby amended to read as follows:

Section 111.1 Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made, until the building official has issued a certificate of occupancy thereof as provided herein. The final of a building permit shall act as the certificate of occupancy for change of use in existing buildings or structures and new single family homes and new condominiums. A certificate of occupancy shall only be issued for new commercial construction. Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction."

SECTION 14. AMENDMENT OF CODE. Section 9-1.10 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.10 Special seismic provisions.

Section 1613.6.1 of the 2010 Edition of the California Building Code is amended to read as follows:

1613.6.1 Assumption of flexible diaphragm. Add the following text at the end of Section 12.3.1.1 of ASCE 7:

Diaphragms constructed of wood structural panels or untopped steel decking shall also be permitted to be idealized as flexible, provided all of the following conditions are met:

1. Toppings of concrete or similar materials are not placed over wood structural panel diaphragms except for nonstructural toppings no greater than 1 ½ inches (38 mm) thick.

2. Each line of vertical elements of the seismic-force-resisting system complies with the allowable story drift of Table 12.12-1.

3. Vertical elements of the seismic-force-resisting system are light-framed walls sheathed with wood structural panels rated for shear resistance or steel sheets.

4. Portions of wood structural panel diaphragms that cantilever beyond the vertical elements of the seismic-force-resisting system are designed in accordance with Section 4.2.5.2 of AF&PA SDPWS.

Equation 16-44 of Section 1613.6.7 of the 2010 Edition of the California Building Code is amended to read as follows:

$$\delta_M = \frac{C_d \delta_{max}}{I} \qquad \text{(Equation 16-44)}$$

where:
C_d = Deflection amplification factor in Table 12.2-1 of ASCE 7.
δ_{max} = Maximum displacement defined in Section 12.8.4.3 of ASCE 7.

Section 1613.8 is added to Chapter 16 of the 2010 Edition of the California Building Code to read as follows:

1613.8 ASCE 7, Table 12.8-2. Modify ASCE 7 Table 12.8-2 by adding the following:

Structure Type	C_t	x
Eccentrically braced steel frames and buckling-restrained braced frames	0.03 (0.0731)[a]	0.75

Section 1613.9 is added to Chapter 16 of the 2010 Edition of the California Building Code to read as follows:

1613.9 ASCE 7, 12.2.3.1, Exception 3. Modify ASCE 7 Section 12.2.3.1 Exception 3 to read as follows:

3. Detached one and two family dwellings up to two stories in height of light frame construction.

Section 1613.10 is added to Chapter 16 of the 2010 Edition of the California Building Code to read as follows:

1613.10 ASCE 7, Section 12.8.7. Modify ASCE 7 Section 12.8.7 by amending Equation 12.8-16 as follows:

$$\theta = \frac{P_x \Delta \underline{I}}{V_x h_{sx} C_d} \qquad (12.8\text{-}16)$$

Section 1613.11 is added to Chapter 16 of the 2010 Edition of the California Building Code to read as follows:

1613.11 ASCE 7, Section 12.11.2.2.3. Modify ASCE 7, Section 12.12.4 to read as follows:

12.11.2.2.3 Wood Diaphragms. In wood diaphragms, the continuous ties shall be in addition to the diaphragm sheathing. Anchorage shall not be accomplished by use of toe nails or nails subject to withdrawal nor shall wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing shall not be considered effective as providing ties or struts required by this section.

For structures assigned to Seismic Design Category D, E or F, wood diaphragms supporting concrete or masonry walls shall comply with the following:

1. The spacing of continuous ties shall not exceed 40 feet. Added chords of diaphragms may be used to form subdiaphragms to transmit the anchorage forces to the main continuous crossties.

2. The maximum diaphragm shear used to determine the depth of the subdiaphragm shall not exceed 75% of the maximum diaphragm shear.

Section 1613.12 is added to Chapter 16 of the 2010 Edition of the California Building Code to read as follows:

1613.12 Seismic Design Provisions for Hillside Buildings.

1613.12.1 Purpose. The purpose of this section is to establish minimum regulations for the design and construction of new buildings and additions to existing buildings when constructing such buildings on or into slopes steeper than one unit vertical in three units horizontal (33.3%). These regulations establish minimum standards for seismic force resistance to reduce the risk of injury or loss of life in the event of earthquakes.

1613.12.2 Scope. The provisions of this section shall apply to the design of the lateral-force-resisting system for hillside buildings at and below the base level diaphragm. The design of the lateral-force-resisting system above the base level diaphragm shall be in accordance with the provisions for seismic and wind design as required elsewhere in this division.

Exception: Non-habitable accessory buildings and decks not supporting or supported from the main building are exempt from these regulations.

1613.12.3 Definitions. For the purposes of this section certain terms are defined as follows:

BASE LEVEL DIAPHRAGM is the floor at, or closest to, the top of the highest level of the foundation.

DIAPHRAGM ANCHORS are assemblies that connect a diaphragm to the adjacent foundation at the uphill diaphragm edge.

DOWNHILL DIRECTION is the descending direction of the slope approximately perpendicular to the slope contours.

FOUNDATION is concrete or masonry which supports a building, including footings, stem walls, retaining walls, and grade beams.

FOUNDATION EXTENDING IN THE DOWNHILL DIRECTION is a foundation running downhill and approximately perpendicular to the uphill foundation.

HILLSIDE BUILDING is any building or portion thereof constructed on or into a slope steeper than one unit vertical in three units horizontal (33.3%). If only a portion of the building is supported on or into the slope, these regulations apply to the entire building.

PRIMARY ANCHORS are diaphragm anchors designed for and providing a direct connection as described in Sections 1613.12.5 and 1613.12.7.3 between the diaphragm and the uphill foundation.

SECONDARY ANCHORS are diaphragm anchors designed for and providing a redundant diaphragm to foundation connection, as described in Sections 1613.12.6 and 1613.12.7.4.

UPHILL DIAPHRAGM EDGE is the edge of the diaphragm adjacent and closest to the highest ground level at the perimeter of the diaphragm.

UPHILL FOUNDATION is the foundation parallel and closest to the uphill diaphragm edge.

1613.12.4 Analysis and Design.

1613.12.4.1 General. Every hillside building within the scope of this section shall be analyzed, designed, and constructed in accordance with the provisions of this division. When the code-prescribed wind design produces greater effects, the wind design shall govern, but detailing requirements and limitations prescribed in this and referenced sections shall be followed.

1613.12.4.2 Base Level Diaphragm-Downhill Direction. The following provisions shall apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.

1613.12.4.2.1 Base for Lateral Force Design Defined. For seismic forces acting in the downhill direction, the base of the building shall be the floor at or closest to the top of the highest level of the foundation.

1613.12.4.2.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.

1613.12.5 Base Shear Resistance-Primary Anchors.

1613.12.5.1 General. The base shear in the downhill direction shall be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.

1613.12.5.2 Location of Primary Anchors. A primary anchor and diaphragm strut shall be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts shall also be provided where interior vertical lateral-force-resisting elements occur above and in contact with the base level diaphragm. The spacing of primary anchors and diaphragm struts or collectors shall in no case exceed 30 feet (9144 mm).

1613.12.5.3 Design of Primary Anchors and Diaphragm Struts. Primary anchors and diaphragm struts shall be designed in accordance with the requirements of Section 1613.12.8.

1613.12.5.4 Limitations. The following lateral-force-resisting elements shall not be designed to resist seismic forces below the base level diaphragm in the downhill direction:

1. Wood structural panel wall sheathing,
2. Cement plaster and lath,
3. Gypsum wallboard, and
4. Tension only braced frames.

Braced frames designed in accordance with the requirements of Section 2205.2.2 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1613.12.6. Base Shear Resistance-Secondary Anchors.

1613.12.6.1 General. In addition to the primary anchors required by Section 1613.12.5, the base shear in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

Exception: Secondary anchors are not required where foundations extending in the downhill direction spaced at not more than 30 feet (9144 mm) on center extend up to and are directly connected to the base level diaphragm for at least 70% of the diaphragm depth.

1613.12.6.2 Secondary Anchor Capacity and Spacing. Secondary anchors at the base level diaphragm shall be designed for a minimum force equal to the base shear, including forces tributary to the base level diaphragm, but not less than 600 pounds per lineal foot (8.76 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1219 mm) on center.

1613.12.6.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.12.8.

1613.12.7 Diaphragms Below the Base Level-Downhill Direction. The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

1613.12.7.1 Diaphragm Defined. Every floor level below the base level diaphragm shall be designed as a diaphragm.

1613.12.7.2 Design Force. Each diaphragm below the base level diaphragm shall be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.

1613.12.7.3 Design Force Resistance-Primary Anchors. The design force described in Section

1613.12.7.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors shall be provided and designed in accordance with the requirements and limitations of Section 1613.12.5.

1613.12.7.4 Design Force Resistance-Secondary Anchors.

1613.12.7.4.1 General. In addition to the primary anchors required in Section 1613.12.7.3, the design force in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in each diaphragm below the base level.

Exception: Secondary anchors are not required where foundations extending in the downhill direction, spaced at not more than 30 feet (9144 mm) on center, extend up to and are directly connected to each diaphragm below the base level for at least 70% of the diaphragm depth.

1613.12.7.4.2 Secondary Anchor Capacity. Secondary anchors at each diaphragm below the base level diaphragm shall be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot (4.38 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four feet (1219 mm) on center.

1613.12.7.4.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.12.8.

1613.12.8 Primary and Secondary Anchorage and Diaphragm Strut Design. Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:

1. Fasteners. All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be minimum 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Nuts shall be tightened to finger tight plus one half (1/2) wrench turn prior to covering the framing.

2. Fastening. The diaphragm to foundation anchorage shall not be accomplished by the use of toenailing, nails subject to withdrawal, or wood in cross-grain bending or cross-grain tension.

3. Size of Wood Members. Wood diaphragm struts collectors, and other wood members connected to primary anchors shall not be less than three-inch (76 mm) nominal width. The effects of eccentricity on wood members shall be evaluated as required per Item 9.

4. Design. Primary and secondary anchorage, including diaphragm struts, splices, and collectors shall be designed for 125% of the tributary force.

5. Allowable Stress Increase. The one-third allowable stress increase permitted under Section 1605.3.2 shall not be taken when the working (allowable) stress design method is used.

6. Steel Element of Structural Wall anchorage System. The strength design forces for steel elements of the structural wall anchorage system, with the exception of anchor bolts and reinforcing steel, shall be increased by 1.4 times the forces otherwise required.

7. Primary Anchors. The load path for primary anchors and diaphragm struts shall be fully developed into the diaphragm and into the foundation. The foundation must be shown to be adequate to resist the concentrated loads from the primary anchors.

8. Secondary Anchors. The load path for secondary anchors and diaphragm struts shall be fully developed in the diaphragm but need not be developed beyond the connection to the foundation.

9. Symmetry. All lateral force foundation anchorage and diaphragm strut connections shall be

symmetrical. Eccentric connections may be permitted when demonstrated by calculation or tests that all components of force have been provided for in the structural analysis or tests.

10. Wood Ledgers. Wood ledgers shall not be used to resist cross-grain bending or cross-grain tension.

1613.12.9 Lateral-Force-Resisting Elements Normal to the Downhill Direction.

1613.12.9.1 General. In the direction normal to the downhill direction, lateral-force-resisting elements shall be designed in accordance with the requirements of this section.

1613.12.9.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 5 for bearing wall and building frame systems.

1613.12.9.3 Vertical Distribution of Seismic Forces. For seismic forces acting normal to the downhill direction the distribution of seismic forces over the height of the building using Section 12.8.3 of ASCE 7 shall be determined using the height measured from the top of the lowest level of the building foundation.

1613.12.9.4 Drift Limitations. The story drift below the base level diaphragm shall not exceed 0.007 times the story height at strength design force level. The total drift from the base level diaphragm to the top of the foundation shall not exceed 3/4 inch (19 mm). Where the story height or the height from the base level diaphragm to the top of the foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of horizontal diaphragm stiffness.

1613.12.9.5 Distribution of Lateral Forces.

1613.12.9.5.1 General. The design lateral force shall be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.

1613.12.9.5.2 Wood Structural Panel Sheathed Walls. The stiffness of a stepped wood structural panel shear wall may be determined by dividing the wall into adjacent rectangular elements, subject to the same top of wall deflection. Deflections of shear walls may be estimated by AF&PA SDPWS Section 4.3.2. Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be eight feet (2438 mm) and the maximum vertical height of a step shall be two feet, eight inches (813 mm).

1613.12.9.5.3 Reinforced Concrete or Masonry Shear Walls. Reinforced concrete or masonry shear walls shall have forces distributed in proportion to the rigidity of each section of the wall.

1613.12.9.6 Limitations. The following lateral force-resisting-elements shall not be designed to resist lateral forces below the base level diaphragm in the direction normal to the downhill direction:

1. Cement plaster and lath,

2. Gypsum wallboard, and

3. Tension-only braced frames.

Braced frames designed in accordance with the requirements of Section 2205.2.2 of this Code may be designed as lateral-force-resisting elements in the direction normal to the downhill direction, provided lateral forces do not induce flexural stresses in any member of

the frame. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1613.12.10 Specific Design Provisions.

1613.12.10.1 Footings and Grade Beams. All footings and grade beams shall comply with the following:

1. Grade beams shall extend at least 12 inches (305 mm) below the lowest adjacent grade and provide a minimum 24-inch (610 mm) distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.

2. Continuous footings shall be reinforced with at least two No. 4 reinforcing bars at the top and two No. 4 reinforcing bars at the bottom.

3. All main footing and grade beam reinforcement steel shall be bent into the intersecting footing and fully developed around each corner and intersection.

4. All concrete stem walls shall extend from the foundation and reinforced as required for concrete or masonry walls.

1613.12.10.2 Protection Against Decay and Termites. All wood to earth separation shall comply with the following:

1. Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing shall extend up to a minimum 18 inches (457 mm) above the highest adjacent grade.

   Exception: At paved garage and doorway entrances to the building, the stem wall need only extend to the finished concrete slab, provided the wood framing is protected with a moisture proof barrier.

2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) and located within 48 inches (1219 mm) of adjacent grade are prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.

1613.12.10.3 Sill Plates. All sill plates and anchorage shall comply with the following:

1. All wood framed walls, including nonbearing walls, when resting on a footing, foundation, or grade beam stem wall, shall be supported on wood sill plates bearing on a level surface.

2. Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.

1613.12.10.4 Column Base Plate Anchorage. The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4,000 pounds (17.8 kN) or more and the base plate for a steel column shall comply with the following:

1. When the post or column is supported on a pedestal extending above the top of a footing or grade beam, the pedestal shall be designed and reinforced as required for concrete or masonry columns. The pedestal shall be reinforced with a minimum of four No. 4 bars extending to the bottom of the footing or grade beam. The top of exterior pedestals shall be sloped for positive drainage.

2. The base plate anchor bolts or the embedded portion of the post base, and the vertical

reinforcing bars for the pedestal, shall be confined with two No. 4 or three No. 3 ties within the top five inches (127 mm) of the concrete or masonry pedestal. The base plate anchor bolts shall be embedded a minimum of 20 bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases shall be galvanized and each anchor bolt shall have at least two galvanized nuts above the base plate.

1613.12.10.5 Steel Beam to Column Supports. All steel beam to column supports shall be positively braced in each direction. Steel beams shall have stiffener plates installed on each side of the beam web at the column. The stiffener plates shall be welded to each beam flange and the beam web. Each brace connection or structural member shall consist of at least two 5/8 inch (15.9 mm) diameter machine bolts.

Section 1613.13 is added to Chapter 16 of the 2010 Edition of the California Building Code to read as follows:

1613.13 Suspended Ceilings. Minimum design and installation standards for suspended ceilings shall be determined in accordance with the requirements of Section 2506.2.1 of this Code and this subsection.

1613.13.1 Scope. This part contains special requirements for suspended ceilings and lighting systems. Provisions of Section 13.5.6 of ASCE 7 shall apply except as modified herein.

1613.13.2 General. The suspended ceilings and lighting systems shall be limited to 6 feet (1828 mm) below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.

1613.13.3 Design and Installation Requirements.

1613.13.3.1 Bracing at Discontinuity. Positive bracing to the structure shall be provided at changes in the ceiling plane elevation or at discontinuities in the ceiling grid system.

1613.13.3.2 Support for Appendages. Cable trays, electrical conduits and piping shall be independently supported and independently braced from the structure.

1613.13.3.3 Sprinkler Heads. All sprinkler heads (drops) except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, shall be designed to allow for free movement of the sprinkler pipes with oversize rings, sleeves or adaptors through the ceiling tile, in accordance with Section 13.5.6.2.2 (e) of ASCE 7.

Sprinkler heads penetrating fire-resistance-rated floor/ceiling or roof/ceiling assemblies shall comply with Section 713 of this Code.

1613.13.3.4 Perimeter Members. A minimum wall angle size of at least a two-inch (51 mm) horizontal leg shall be used at perimeter walls and interior full height partitions. The first ceiling tile shall maintain 3/4 inch (19 mm) clear from the finish wall surface. An equivalent alternative detail that will provide sufficient movement due to anticipated lateral building displacement may be used in lieu of the long leg angle subject to the approval of the Superintendent of Building.

1613.13.4 Special Requirements for Means of Egress. Suspended ceiling assemblies located along means of egress serving an occupant load of 30 or more shall comply with the following provisions.

1613.13.4.1 General. Ceiling suspension systems shall be connected and braced with vertical hangers attached directly to the structural deck along the means of egress serving an occupant load of 30 or more and at lobbies accessory to Group A Occupancies. Spacing of vertical hangers shall not exceed 2 feet (610 mm) on center along the entire length of the suspended ceiling assembly located along the means of egress or at the lobby.

1613.13.4.2 Assembly Device. All lay-in panels shall be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a 4-foot (1219 mm) radius of the exit lights and exit signs.

1613.13.4.3 Emergency Systems. Independent supports and braces shall be provided for light fixtures required for exit illumination. Power supply for exit illumination shall comply with the requirements of Section 1006.3 of this Code.

1613.13.4.4 Supports for Appendage. Separate support from the structural deck shall be provided for all appendages such as light fixtures, air diffusers, exit signs, and similar elements.

Section 1704.4 of the 2010 Edition of the California Building Code is amended to read as follows:

1704.4 Concrete Construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4.

Exceptions: Special inspection shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa).

2. Continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:

   2.1. The footings support walls of light-frame construction;

   2.2. The footings are designed in accordance with Table 1805.4.2; or

   2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa), regardless of the compressive strength specified in the construction documents or used in the footing construction.

3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 Mpa).

4. Concrete patios, driveways and sidewalks, on grade.

Section 1704.8 of the 2010 Edition of the California Building Code is amended to read as follows:

1704.8 Driven deep foundations and connection grade beams. Special inspections shall be performed during installation and testing of driven deep foundation elements as required by Table 1704.8. Special inspections shall be performed for connection grade beams in accordance with Section 1704.4 for structures assigned to Seismic Design Category D, E or F. The approved geotechnical report, and the construction documents prepared by the registered design professionals, shall be used to determine compliance.

Section 1704.9 of the 2010 Edition of the California Building Code is amended to read as follows:

1704.9 Cast-in-place deep foundations and connection grade beams. Special inspections shall be performed during installation and testing of cast-in-place deep foundation elements as required by Table 1704.9. Special inspections shall be performed for connection grade beams in accordance with Section 1704.4 for structures assigned to Seismic Design Category D, E or F. The approved geotechnical report, and the construction documents prepared by the registered design professionals,

shall be used to determine compliance.

Section 1705.3 of the 2010 Edition of the California Building Code is amended to read as follows:

1705.3 Seismic resistance. The statement of special inspections shall include seismic requirements for cases covered in Sections 1705.3.1 through 1705.3.5.

Exception: Seismic requirements are permitted to be excluded from the statement of special inspections for structures designed and constructed in accordance with the following:

1. The structure consists of light-frame construction; the design spectral response acceleration at short periods, S_{DS}, as determined in Section 1613.5.4, does not exceed 0.5g; and the height of the structure does not exceed 35 feet (10 668 mm) above grade plane; or

2. The structure is constructed using a reinforced masonry structural system or reinforced concrete structural system; the design spectral response acceleration at short periods, S_{DS}, as determined in Section 1613.5.4, does not exceed 0.5g, and the height of the structure does not exceed 25 feet (7620 mm) above grade plane; or

3. Detached one- or two-family dwellings not exceeding two stories above grade plane, provided the structure is not assigned to Seismic Design Category D, E or F and does not have any of the following plan or vertical irregularities in accordance with Section 12.3.2 of ASCE 7:

   3.1 Torsional irregularity.

   3.2 Nonparallel systems.

   3.3 Stiffness irregularity—extreme soft story and soft story.

   3.4 Discontinuity in capacity—weak story.

Section 1710.1 of the 2010 Edition of the California Building Code is amended to read as follows:

1710.1 General. Where required by the provisions of Section 1710.2 or 1710.3, the owner shall employ a structural observer to perform structural observations as defined in Section 1702. The structural observer shall be one of the following individuals:

1. The registered design professional responsible for the structural design, or

2. A registered design professional designated by the registered design professional responsible for the structural design.

Prior to the commencement of observations, the structural observer shall submit to the building official a written statement identifying the frequency and extent of structural observations.

The owner or owner's representative shall coordinate and call a preconstruction meeting between the structural observer, contractors, affected subcontractors and special inspectors. The structural observer shall preside over the meeting. The purpose of the meeting shall be to identify the major structural elements and connections that affect the vertical and lateral load resisting systems of the structure and to review scheduling of the required observations. A record of the meeting shall be included in the report submitted to the building official.

Observed deficiencies shall be reported in writing to the owner or owner's representative, special inspector, contractor and the building official. Upon the form prescribed by the building official, the structural observer shall submit to the building official a written statement at each significant construction stage stating that the site visits have been made and identifying any reported

deficiencies which, to the best of the structural observer's knowledge, have not been resolved. A final report by the structural observer which states that all observed deficiencies have been resolved is required before acceptance of the work by the building official.

Section 1710.2 of the 2010 Edition of the California Building Code is amended to read as follows:

1710.2 Structural observations for seismic resistance. Structural observations shall be provided for those structures assigned to Seismic Design Category D, E or F, as determined in Section 1613, where one or more of the following conditions exist:

1. The structure is classified as Occupancy Category III or IV in accordance with Table 1604.5.

2. The height of the structure is greater than 75 feet (22860 mm) above the base.

3. The structure is classified as Occupancy Category I or II in accordance with Table 1604.5, and a lateral design is required for the structure or portion thereof.

   Exception: One-story wood framed Group R-3 and Group U Occupancies less than 2,000 square feet in area, provided the adjacent grade is not steeper than 1 unit vertical in 10 units horizontal (10% sloped), assigned to Seismic Design Category D.

4. When so designated by the registered design professional responsible for the structural design.

4. When such observation is specifically required by the building official.

Section 1807.1.4 of the 2010 Edition of the California Building Code is amended to read as follows:

1807.1.4 Permanent wood foundation systems. Permanent wood foundation systems shall be designed and installed in accordance with AF&PA PWF. Lumber and plywood shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B and Section 5.2) and shall be identified in accordance with Section 2303.1.8.1. Permanent wood foundation systems shall not be used for structures assigned to Seismic Design Category D, E or F.

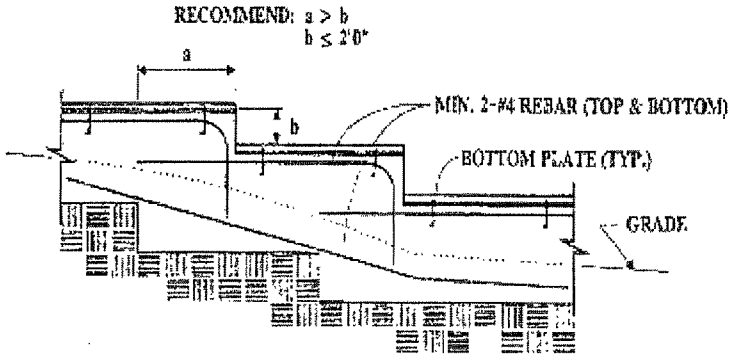
Section 1807.1.6 of the 2010 Edition of the California Building Code is amended to read as follows:

1807.1.6 Prescriptive design of concrete and masonry foundation walls. Concrete and masonry foundation walls that are laterally supported at the top and bottom shall be permitted to be designed and constructed in accordance with this section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.

Section 1809.3 of the 2010 Edition of the California Building Code is amended to read as follows:

1809.3 Stepped footings. The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope).

For structures assigned to Seismic Design Category D, E or F, the stepping requirement shall also apply to the top surface of grade beams supporting walls. Footings shall be reinforced with four 1/2-inch diameter (12.7 mm) deformed reinforcing bars. Two bars shall be place at the top and bottom of the footings as shown in Figure 1809.3.



STEPPED FOUNDATIONS

FIGURE 1809.3
STEPPED FOOTING

Section 1809.7 and Table 1809.7 of the 2010 Edition of the California Building Code are amended to read as follows:

1809.7 Prescriptive footings for light-frame construction. Where a specific design is not provided, concrete or masonry-unit footings supporting walls of light-frame construction shall be permitted to be designed in accordance with Table 1809.7. Prescriptive footings in Table 1809.7 shall not exceed one story above grade plane for structures assigned to Seismic Design Category D, E or F.

TABLE 1809.7
PRESCRIPTIVE FOOTINGS SUPPORTING WALLS OF LIGHT-FRAME CONSTRUCTION [a, b, c, d, e]

NUMBER OF FLOORS SUPPORTED BY THE FOOTING [f]	WIDTH OF FOOTING (inches)	THICKNESS OF FOOTING (inches)
1	12	6
2	15	6
3	18	8 [g]

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm

a. Depth of footings shall be in accordance with Section 1809.4.
b. The ground under the floor shall be permitted to be excavated to the elevation of the top of the footing.
c. Not Adopted.
d. See Section 1908 for additional requirements for concrete footings of structures assigned to Seismic Design Category C, D, E or F.
e. For thickness of foundation walls, see Section 1807.1.6.
f. Footings shall be permitted to support a roof addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.

Section 1809.12 of the 2010 Edition of the California Building Code is amended to read as follows:

1809.12 Timber footings. Timber footings shall be permitted for buildings of Type V construction and as otherwise approved by the building official. Such footings shall be treated in accordance with AWPA U1 (Commodity Specification A, Use Category 4B). Treated timbers are not required where placed entirely below permanent water level, or where used as capping for wood piles that project above the water level over submerged or marsh lands. The compressive stresses perpendicular to grain in untreated timber footing supported upon treated piles shall not exceed 70 percent of the allowable stresses for the species and grade of timber as specified in the AF&PA NDS. Timber footings shall not be used in structures assigned to Seismic Design Category D, E or F.

Section 1810.3.2.4 of the 2010 Edition of the California Building Code is amended to read as follows:

1810.3.2.4 Timber. Timber deep foundation elements shall be designed as piles or poles in accordance with AF&PA NDS. Round timber elements shall conform to ASTM D 25. Sawn timber elements shall conform to DOC PS-20. Timber shall not be used in structures assigned to Seismic Design Category D, E or F.

Section 1908.1 is amended to read as shown below and Sections 1908.1.11 thru 1908.1.14 is added to Chapter 19 of the 2010 Edition of the California Building Code to read as follows:

1908.1 General. The text of ACI 318 shall be modified as indicated in Sections 1908.1.1 through 1908.1.14.

1908.1.11 ACI 318, Section 21.6.4.1. Modify ACI 318, Section 21.6.4.1, to read as follows:

Where the calculated point of contraflexure is not within the middle half of the member clear height, provide transverse reinforcement as specified in ACI 318 Sections 21.6.4.1, Items (a) through (c), over the full height of the member.

1908.1.12 ACI 318, Section 21.6.4. Modify ACI 318, Section 21.6.4, by adding Section 21.6.4.8 to read as follows:

21.6.4.8 – At any section where the design strength, φP_n, of the column is less than the sum of the shears V_e computed in accordance with ACI 318 Sections 21.5.4.1 and 21.6.5.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 21.6.4.1 through 21.6.4.3 shall be provided. For beams framing into opposite sides of the column, the moment components may be assumed to be of opposite sign. For the determination of the design strength, φP_n, of the column, these moments may be assumed to result from the deformation of the frame in any one principal axis.

1908.1.13 ACI 318, Section 21.9.4. Modify ACI 318, Section 21.9.4, by adding Section 21.9.4.6 to read as follows:

21.9.4.6 – Walls and portions of walls with $P_u > 0.35P_o$ shall not be considered to contribute to the calculated strength of the structure for resisting earthquake-induced forces. Such walls shall conform to the requirements of ACI 318 Section 21.13.

1908.1.14 ACI 318, Section 21.11.6. Modify ACI 318, Section 21.11.6, by adding the following:

Collector and boundary elements in topping slabs placed over precast floor and roof elements shall not be less than 3 inches (76 mm) or 6 d_b thick, where d_b is the diameter of the largest reinforcement in the topping slab.

Section 1908.1.2 of the 2010 Edition of the California Building Code is amended to read as follows:

1908.1.2 ACI 318, Section 21.1.1. Modify ACI 318, Sections 21.1.1.3 and 21.1.1.7 as follows:

21.1.1.3 – Structures assigned to Seismic Design Category A shall satisfy requirements of Chapters 1 to 19 and 22; Chapter 21 does not apply. Structures assigned to Seismic Design Category B, C, D, E or F also shall satisfy 21.1.1.4 through 21.1.1.8, as applicable. Except for structural elements of plain concrete complying with Section 1908.1.8 of the International Building Code, structural elements of plain concrete are prohibited in structures assigned to Seismic Design Category C, D, E or F.

21.1.1.7 – Structural systems designated as part of the seismic-force-resisting system shall be

restricted to those permitted by ASCE 7. Except for Seismic Design Category A, for which Chapter 21 does not apply, the following provisions shall be satisfied for each structural system designated as part of the seismic-force-resisting system, regardless of the Seismic Design Category:

(a) Ordinary moment frames shall satisfy 21.2.
(b) Ordinary reinforced concrete structural walls and ordinary precast structural walls need not satisfy any provisions in Chapter 21.
(c) Intermediate moment frames shall satisfy 21.3.
(d) Intermediate precast structural walls shall satisfy 21.4.
(e) Special moment frames shall satisfy 21.5 through 21.8.
(f) Special structural walls shall satisfy 21.9.
(g) Special structural walls constructed using precast concrete shall satisfy 21.10.

All special moment frames and special structural walls shall also satisfy 21.1.3 through 21.1.7. Concrete tilt-up wall panels classified as intermediate precast structural wall system shall satisfy 21.9 in addition to 21.4.2 and 21.4.3 for structures assigned to Seismic Design Category D, E or F.

Section 1908.1.3 of the 2010 Edition of the California Building Code is amended to read as follows:

1908.1.3 ACI 318, Section 21.4. Modify ACI 318, Section 21.4, by renumbering Section 21.4.3 to become 21.4.4 and adding new Sections 21.4.3, 21.4.5, 21.4.6 and 21.4.7 to read as follows:

21.4.3 – Connections that are designed to yield shall be capable of maintaining 80 percent of their design strength at the deformation induced by the design displacement or shall use Type 2 mechanical splices.

21.4.4 – Elements of the connection that are not designed to yield shall develop at least 1.5 S_y.

21.4.5 – Wall piers in Seismic Design Category D, E or F shall comply with Section 1908.1.4 of this Code.

21.4.6 – Wall piers not designed as part of a moment frame in buildings assigned to Seismic Design Category C shall have transverse reinforcement designed to resist the shear forces determined from 21.3.3. Spacing of transverse reinforcement shall not exceed 8 inches (203 mm). Transverse reinforcement shall be extended beyond the pier clear height for at least 12 inches (305 mm).

Exceptions:
1. Wall piers that satisfy 21.13.
2. Wall piers along a wall line within a story where other shear wall segments provide lateral support to the wall piers and such segments have a total stiffness of at least six times the sum of the stiffnesses of all the wall piers.

21.4.7 – Wall segments with a horizontal length-to-thickness ratio less than 2.5 shall be designed as columns.

Section 1908.1.8 of the 2010 Edition of the California Building Code is amended to read as follows:

1908.1.8 ACI 318, Section 22.10. Delete ACI 318, Section 22.10, and replace with the following:

22.10 – Plain concrete in structures assigned to Seismic Design Category C, D, E or F.

22.10.1 – Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

(a) Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement per cubic yard.

(b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

(c) Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

In detached one- and two-family dwellings three stories or less in height and constructed with stud-bearing walls, plain concrete footings with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

Section 1909.4 of the 2010 Edition of the California Building Code is amended to read as follows:

1909.4 Design. Structural plain concrete walls, footings and pedestals shall be designed for adequate strength in accordance with ACI 318, Section 22.4 through 22.8.

Exception: For Group R-3 occupancies and buildings or other occupancies less than two stories above grade plane of light-frame construction, the required edge thickness of ACI 318 is permitted to be reduced to 6 inches (152 mm), provided that the footing does not extend more than 4 inches (102 mm) on either side of the supported wall. This exception shall not apply to structural elements designed to resist seismic lateral forces for structures assigned to Seismic Design Category D, E or F.

Section 2204.1.1 is added to Chapter 22 of the 2010 Edition of the California Building Code to read as follows:

2204.1.1 Consumables for welding.

2204.1.1.1 Seismic Force Resisting System (SFRS) welds. All welds used in members and connections in the SFRS shall be made with filler metals meeting the requirements specified in AWS D1.8 Clause 6.3. AWS D1.8 Clauses 6.3.5, 6.3.6, 6.3.7 and 6.3.8 shall apply only to demand critical welds.

2204.1.1.2 Demand critical welds. Where welds are designated as demand critical, they shall be made with filler metals meeting the requirements specified in AWS D1.8 Clause 6.3.

Section 2205.4 is added to Chapter 22 of the 2010 Edition of the California Building Code to read as follows:

2205.4 AISC 341, Part I, Section 13.2 Members. Add Section 13.2f to read as follows:

13.2f. Member Types

The use of rectangular HSS are not permitted for bracing members, unless filled solid with cement grout having a minimum compressive strength of 3,000 psi (20.7 MPa) at 28 days. The effects of composite action in the filled composite brace shall be considered in the sectional properties of the system where it results in the more severe loading condition or detailing.

Section 2304.11.7 of the 2010 Edition of the California Building Code is amended to read as follows:

2304.11.7 Wood used in retaining walls and cribs. Wood installed in retaining or crib walls shall be preservative treated in accordance with AWPA U1 (Commodity Specifications A or F) for soil and fresh water use. Wood shall not be used in retaining or crib walls for structures assigned to Seismic Design Category D, E or F.

Section 2305.4 is added to Chapter 23 of the 2010 Edition of the California Building Code to read as follows:

2305.4 Quality of Nails. In Seismic Design Category D, E or F, mechanically driven nails used in wood structural panel shear walls shall meet the same dimensions as that required for hand-driven nails, including diameter, minimum length and minimum head diameter. Clipped head or box nails are not permitted in new construction. The allowable design value for clipped head nails in existing construction may be taken at no more than the nail-head-area ratio of that of the same size hand-driven nails.

Section 2305.5 is added to Chapter 23 of the 2010 Edition of the California Building Code to read as follows:

2305.5 Hold-down connectors. In Seismic Design Category D, E or F, hold-down connectors shall be designed to resist shear wall overturning moments using approved cyclic load values or 75 percent of the allowable seismic load values that do not consider cyclic loading of the product. Connector bolts into wood framing shall require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by 3 inches by 3 inches (5.82 mm by 76 mm by 76 mm) in size. Hold-down connectors shall be tightened to finger tight plus one half (1/2) wrench turn just prior to covering the wall framing.

Tables 2306.2.1(3) and 2306.2.1(4) are added to Chapter 23 of the 2010 Edition of the California Building Code and Section 2306.2.1 of the 2010 Edition of the California Building Code is amended to read as follows:

2306.2.1 Wood structural panel diaphragms. Wood structural panel diaphragms shall be designed and constructed in accordance with AF&PA SDPWS. Wood structural panel diaphragms are permitted to resist horizontal forces using the allowable shear capacities set forth in Table 2306.2.1(1) or 2306.2.1(2). For structures assigned to Seismic Design Category D, E or F, the allowable shear capacities shall be set forth in Table 2306.2.1(3) or 2306.2.1(4). The allowable shear capacities in Table 2306.2.1(1) or 2306.2.1(2) are permitted to be increased 40 percent for wind design.

Wood structural panel diaphragms fastened with staples shall not used to resist seismic forces in structures assigned to Seismic Design Category D, E or F.

Exception: Staples may be used for wood structural panel diaphragms when the allowable shear values are substantiated by cyclic testing and approved by the building official.

Wood structural panel diaphragms used to resist seismic forces in structures assigned to Seismic Design Category D, E or F shall be applied directly to the framing members.

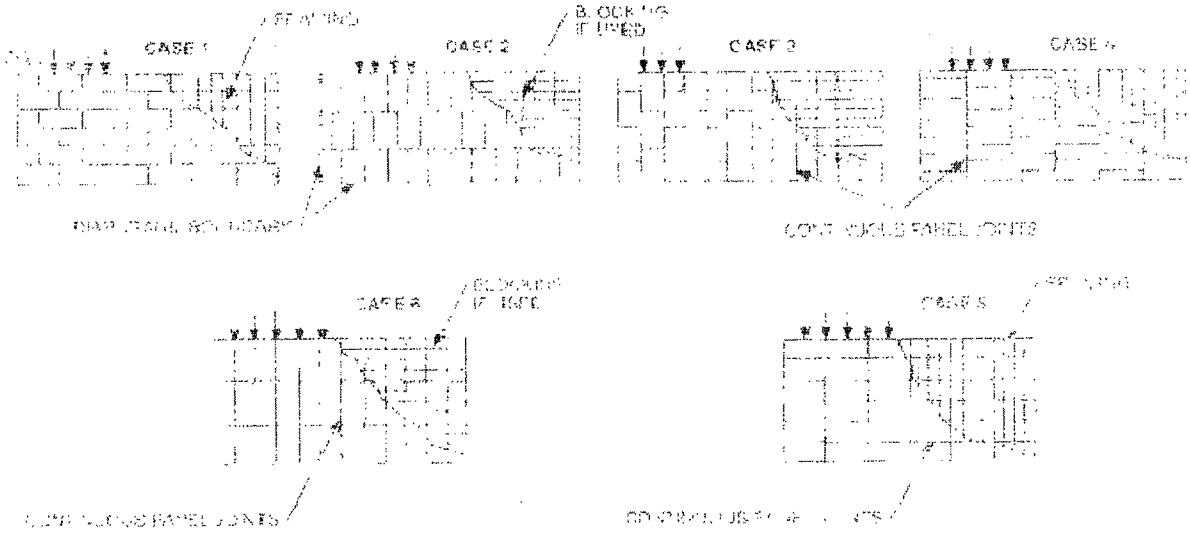
Exception: Wood structural panel diaphragm is permitted to be fastened over solid lumber planking or laminated decking, provided the panel joints and lumber planking or laminated decking joints do not coincide.

TABLE 2306.2.1(3)
ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL DIAPHRAGMS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE[a] FOR SEISMIC LOADING[f] FOR STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E OR F

PANEL GRADE	COMMON NAIL SIZE	MINIMUM FASTENER PENETRATION IN FRAMING (inches)	MINIMUM NOMINAL PANEL THICKNESS (inch)	MINIMUM NOMINAL WIDTH OF FRAMING MEMBERS AT ADJOINING PANEL EDGES AND BOUNDARIES[e] (inches)	BLOCKED DIAPHRAGMS			
					Fastener spacing (inches) at diaphragm boundaries (all cases) at continuous panel edges parallel to load (Cases 3,4), and at all panel edges (Cases 5, 6)[b]			
					6	4	2 ½[c]	2[c]
					Fastener spacing (inches) at other panel edges (Cases 1,2,3 and 4)[b]			
					6	6	4	3
Structural I Grades	8d (2 ½" x 0.131")	1 3/8	3/8	2	270	360	530	600
				3	300	400	600	675
	10d[d] (3" x 0.148")	1 1/2	15/32	2	320	425	640	730
				3	360	480	720	820
Sheathing, single floor and other grades covered in DOC PS1 and PS2	6d[e] (2" x 0.113")	1 1/4	3/8	2	185	250	375	420
				3	210	280	420	475
	8d (2 ½" x 0.131")	1 3/8		2	240	320	480	545
				3	270	360	540	610
	8d (2 ½" x 0.131")	1 3/8	7/16	2	255	340	505	575
				3	285	380	570	645
	8d (2 ½" x 0.131")	1 3/8	15/32	2	270	360	530	600
				3	300	400	600	675
	10d[d] (3" x 0.148")	1 1/2		2	290	385	575	655
				3	324	430	650	735
	10d[d] (3" x 0.148")	1 1/2	19/32	2	320	425	640	730
				3	360	480	720	820

TABLE 2306.2.1(3)–continued

ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL DIAPHRAGMS WITH FRAMING OF DOUGLAS FIR-LARCH, OR SOUTHERN PINE[a] FOR SEISMIC LOADING[f] FOR STRUCTURES ASSIGNED TO SEISMIC DESIGN CATERGORY D, E OR F



For SI: 1 inch = 25.4 mm, 1 pound per foot = 14.5939 N/m.

a. For framing of other species: (1) Find specific gravity for species of lumber in AF&PA NDS. (2) For nails find shear value from table above for nail size for actual grade and multiply value by the following adjustment factor: Specific Gravity Adjustment Factor = [1-(0.5-SG)], where SG = Specific Gravity of the framing lumber. This adjustment factor shall not be greater than 1.

b. Space fasteners maximum 12 inches o.c. along intermediate framing members (6 inches o.c. where supports are spaced 48 inches o.c.).

c. Framing at adjoining panel edges shall be 3 inches nominal or thicker, and nails at all panel edges shall be staggered where panel edge nailing is specified at 2 ½ inches o.c. or less.

d. Framing at adjoining panel edges shall be 3 inches nominal or thicker, and nails at all panel edges shall be staggered where both of the following conditions are met: (1) 10d nails having penetration into framing of more than 1 ½ inches and (2) panel edge nailing is specified at 3 inches o.c. or less.

e. The minimum nominal width of framing members not located at boundaries or adjoining panel edges shall be 2 inches.

f. For shear loads of normal or permanent load duration as defined by the AF&PA NDS, the values in the table above shall be multiplied by 0.63 or 0.56, respectively.

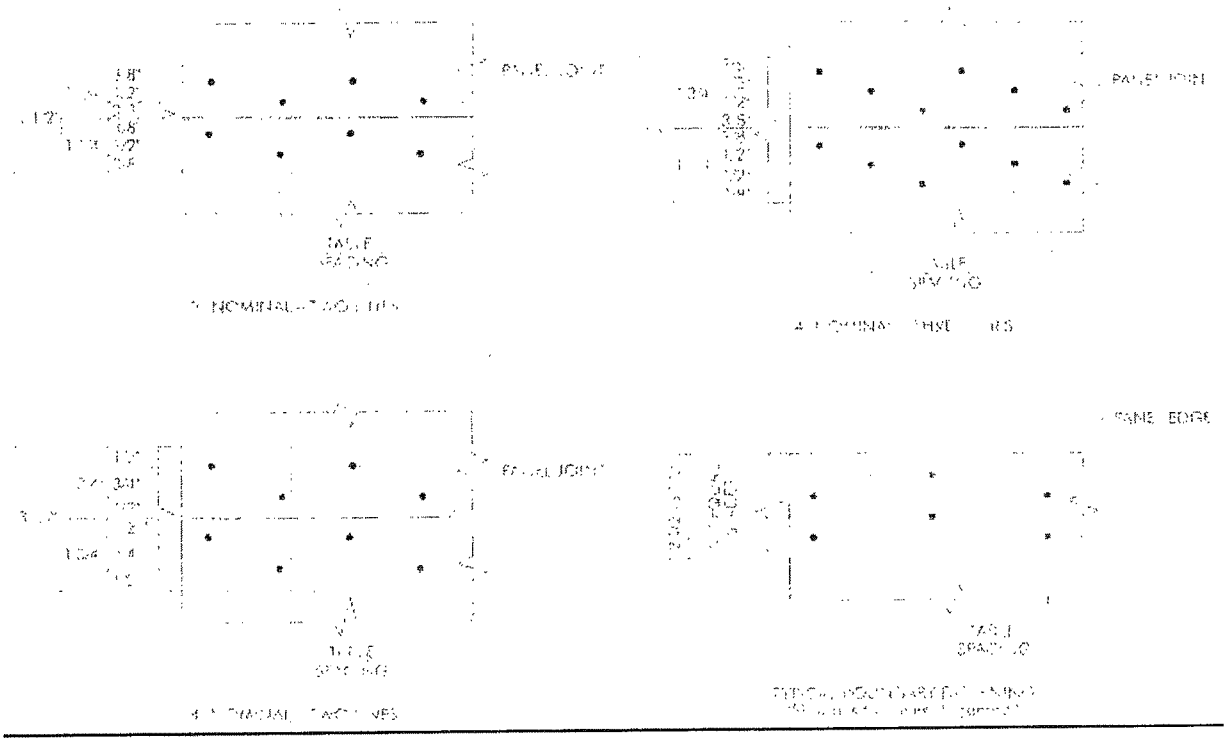
TABLE 2306.2.1(4)
ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL BLOCKED DIAPHRAGMS UTILIZING MULTIPLE ROWS OF FASTENERS (HIGH LOAD DIAPHRAGMS) WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE[a] FOR SEISMIC LOADING[b,f,g]
FOR STRUCTURES ASSIGNED TO SEISMIC DESIGN CATERGORY D, E OR F

PANEL GRADE[c]	COMMON NAIL SIZE	MINIMUM FASTENER PENETRATION IN FRAMING (inches)	MINIMUM NOMINAL PANEL THICKNESS (inch)	MINIMUM NOMINAL WIDTH OF FRAMING MEMBERS AT ADJOINING PANEL EDGES AND BOUNDARIES[e] (inches)	LINES OF FASTENERS	BLOCKED DIAPHRAGMS			
						Cases 1 and 2[d]			
						Fastener Spacing Per Line at Boundaries (inches)			
						4		2 1/2	
						Fastener Spacing Per Line at Other Panel Edges (inches)			
						6	4	4	3
Structural I grades	10d common nails	1 1/2	15/32	3	2	605	815	875	1,150
				4	2	700	915	1,005	1,290
				4	3	875	1,220	1,285	1,395
			19/32	3	2	670	880	965	1,255
				4	2	780	990	1,110	1,440
				4	3	965	1,320	1,405	1,790
			23/32	3	2	730	955	1,050	1,365
				4	2	855	1,070	1,210	1,565
				4	3	1,050	1,430	1,525	1,800
Sheathing, single floor and other grades covered in DOC PS1 and PS2	10d common nails	1 1/2	15/32	3	2	525	725	765	1,010
				4	2	605	815	875	1,105
				4	3	765	1,085	1,130	1,195
			19/32	3	2	650	860	935	1,225
				4	2	755	965	1,080	1,370
				4	3	935	1,290	1,365	1,485
			23/32	3	2	710	935	1,020	1,335
				4	2	825	1,050	1,175	1,445
				4	3	1,020	1,400	1,480	1,565

For SI: 1 inch = 25.4 mm, 1 pound per foot = 14.5939 N/m.

a. For framing of other species: (1) Find specific gravity for species of lumber in AF&PA NDS. (2) For nails find shear value from table above for nail size for actual grade and multiply value by the following adjustment factor: Specific Gravity Adjustment Factor = [1-(0.5-SG)], where SG = Specific Gravity of the framing lumber. This adjustment factor shall not be greater than 1.
b. Fastening along intermediate framing members: Space fasteners a maximum of 12 inches on center, except 6 inches on center for spans greater than 32 inches.
c. Panels conforming to PS1 or PS 2.
d. This table gives shear values for Cases 1 and 2 as shown in Table 2306.2.1(3). The values shown are applicable to Cases 3, 4, 5 and 6 as shown in Table 2306.2.1(3), providing fasteners at all continuous panels edges are spaced in accordance with the boundary fastener spacing.
e. The minimum nominal depth of framing members shall be 3 inches nominal. The minimum nominal width of framing members not located at boundaries or adjoining panel edges shall be 2 inches.
f. High load diaphragms shall be subject to special inspection in accordance with Section 1704.6.1.
g. For shear loads of normal or permanent load duration as defined by the AF&PA NDS, the values in the table above shall be multiplied by 0.63 or 0.56, respectively.

TABLE 2306.2.1(4)–continued
ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL BLOCKED DIAPHRAGMS UTILIZING MULTIPLE ROWS OF FASTENERS (HIGH LOAD DIAPHRAGMS) WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE[a] FOR SEISMIC LOADING[b,f,g]
FOR STRUCTURES ASSIGNED TO SEISMIC DESIGN CATERGORY D, E OR F



NOTE: SPACE PANEL END AND EDGE JOINT 1/8-INCH. REDUCE SPACING BETWEEN LINES OF NAILS AS NECESSARY TO MAINTAIN MINIMUM 3/8-INCH FASTENER EDGE MARGINS, MINIMUM SPACING BETWEEN LINES IS 3/8-INCH

Table 2306.3(2) is added to Chapter 23 of the 2010 Edition of the California Building Code and Section 2306.3 and Table 2306.3 of the 2010 Edition of the California Building Code are amended to read as follows:

2306.3 Wood structural panel shear walls. Wood structural panel shear walls shall be designed and constructed in accordance with AF&PA SDPWS. Wood structural panel shear walls are permitted to resist horizontal forces using the allowable shear capacities set forth in Table 2306.3(1). For structures assigned to Seismic Design Category D, E or F, the allowable shear capacities shall be set forth in Table 2306.3(2). The allowable shear capacities in Table 2306.3 are permitted to be increased 40 percent for wind design.

Wood structural panel shear walls used to resist seismic forces in structures assigned to Seismic Design Category D, E or F shall not be less than 4 feet by 8 feet (1219 mm by 2438 mm), except at boundaries and at changes in framing. Wood structural panel thickness for shear walls shall not be less than 3/8 inch thick and studs shall not be spaced at more than 16 inches on center.

The maximum allowable shear value for three-ply plywood resisting seismic forces in structures assigned to Seismic Design Category D, E or F is 200 pounds per foot (2.92 kn/m). Nails shall be placed not less than 1/2 inch (12.7 mm) in from the panel edges and not less than 3/8 inch (9.5mm) from the edge of the connecting members for shear greater than 350 pounds per foot (5.11kN/m).

Nails shall be placed not less than 3/8 inch (9.5 mm) from panel edges and not less than 1/4 inch (6.4 mm) from the edge of the connecting members for shears of 350 pounds per foot (5.11kN/m) or less.

Wood structural panel shear walls fastened with staples shall not used to resist seismic forces in structures assigned to Seismic Design Category D, E or F.

Exception: Staples may be used for wood structural panel shear walls when the allowable shear values are substantiated by cyclic testing and approved by the building official.

Wood structural panel shear walls used to resist seismic forces in structures assigned to Seismic Design Category D, E or F shall be applied directly to the framing members.

TABLE 2306.3(1)
ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL SHEAR WALLS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE[a] FOR WIND OR SEISMIC LOADING[b, h, l, j, l, m, n]

TABLE 2306.3(2)
ALLOWABLE SHEAR (POUNDS PER FOOT) FOR WOOD STRUCTURAL PANEL SHEAR WALLS WITH FRAMING OF DOUGLAS FIR-LARCH OR SOUTHERN PINE[a] FOR SEISMIC LOADING[b, h, j, k, l] FOR STRUCTURES ASSIGNED TO SEISMIC DESIGN CATEGORY D, E OR F

PANEL GRADE	MINIMUM NOMINAL PANEL THICKNESS (inch)	MINIMUM FASTENER PENETRATION IN FRAMING (inches)	ALLOWABLE SHEAR VALUE FOR SEISMIC FORCES PANELS APPLIED DIRECTLY TO FRAMING				
			COMMON NAIL SIZE	Fastener spacing at panel edges (inches)			
				6	4	3	2[e]
Structural I sheathing	3/8	1 3/8	8d (2½"x0.131" common)	200	200	200	200
	7/16	1 3/8	8d (2½"x0.131" common)	255	395	505	670
	15/32	1 3/8	8d (2½"x0.131" common)	280	430	550	730
		1 1/2	10d (3"x0.148" common)	340	510	665[f]	870
Sheathing, plywood siding[g] except Group 5 Species	3/8[c]	1 3/8	8d (2½"x0.113")	160	200	200	200

For SI: 1 inch = 25.4 mm, 1 foot = 25.4 mm, 1 pound per foot = 14.5939 N/m.

a. For framing of other species: (1) Find specific gravity for species of lumber in AF&PA NDS. (2) For nails find shear value from table above for nail size for actual grade and multiply value by the following adjustment factor: Specific Gravity Adjustment Factor = [1-(0.5-SG)], where SG = Specific Gravity of the framing lumber. This adjustment factor shall not be greater than 1.
b. Panel edges backed with 2-inch nominal or thicker framing. Install panels either horizontally or vertically. Space fasteners maximum 6 inches on center along intermediate framing members for 3/8-inch and 7/16-inch panels installed on studs spaced 24 inches on center. For other conditions and panel thickness, space fasteners maximum 12 inches on center on intermediate supports.
c. 3/8-inch panel thickness or siding with a span rating of 16 inches on center is the minimum recommended where applied direct to framing as exterior siding. For grooved panel siding, the nominal panel thickness is the thickness of the panel measured at the point of nailing.
d. Allowable shear values are permitted to be increased to values shown for 15/32-inch sheathing with same nailing provided (a) studs are spaced a maximum of 16 inches on center, or (b) panels are applied with long dimension across studs.
e. Framing at adjoining panel edges shall be 3 inches nominal or thicker, and nails shall be staggered where nails are spaced 2 inches on center or less.
f. Framing at adjoining panel edges shall be 3 inches nominal or thicker, and nails shall be staggered where both of the following conditions are met: (1) 10d (3"x0.148") nails having penetration into framing of more than 1-1/2 inches and (2) nails are spaced 3 inches on center or less.
g. Values apply to all-veneer plywood. Thickness at point of fastening on panel edges governs shear values.
h. Where panels applied on both faces of a wall and nail spacing is less than 6 inches o.c. on either side, panel joints shall be offset to fall on different framing members. Or framing shall be 3-inch nominal or thicker at adjoining panel edges and nails at all panel edges shall be staggered.
i. Where shear design values exceed 350 pounds per linear foot, all framing members receiving edge nailing from abutting panels shall not be less than a single 3-inch nominal member, or two 2-inch nominal members fastened together in accordance with Section 2306.1 to transfer the design shear value between framing members. Wood structural panel joint and sill plate

nailing shall be staggered at all panel edges. See Section 4.3.6.1 and 4.3.6.4.3 of AF&PA SDPWS for sill plate size and anchorage requirements.

j. Galvanized nails shall be hot dipped or tumbled.

k. For shear loads of normal or permanent load duration as defined by the AF&PA NDS, the values in the table above shall be multiplied by 0.63 or 0.56, respectively.

l. The maximum allowable shear value for three-ply plywood resisting seismic forces is 200 pounds per foot (2.92 kn/m).

Section 2306.7 of the 2010 Edition of the California Building Code are amended to read as follows:

2306.7 Shear walls sheathed with other materials. Shear walls sheathed with portland cement plaster, gypsum lath, gypsum sheathing or gypsum board shall be designed and constructed in accordance with AF&PA SDPWS. Shear walls sheathed with these materials are permitted to resist horizontal forces using the allowable shear capacities set forth in Table 2306.7. Shear walls sheathed with portland cement plaster, gypsum lath, gypsum sheathing or gypsum board shall not be used to resist seismic forces in structures assigned to Seismic Design Category E or F.

Shear walls sheathed with lath, plaster or gypsum board shall not be used below the top level in a multi-level building for structures assigned to Seismic Design Category D.

Section 2308.3.4 of Chapter 23 of the 2010 Edition of the California Building Code is amended to read as follows:

2308.3.4 Braced wall line support. Braced wall lines shall be supported by continuous foundations.

Exception: For structures with a maximum plan dimension not over 50 feet (15240 mm), continuous foundations are required at exterior walls only for structures not assigned to Seismic Design Category D, E or F.

Section 2308.12.2 of Chapter 23 of the 2010 Edition of the California Building Code is amended to read as follows:

2308.12.2 Concrete or masonry. Concrete or masonry walls and stone or masonry veneer shall not extend above the basement.

Exception: Stone and masonry veneer is permitted to be used in the first story above grade plane in Seismic Design Category D, provided the following criteria are met:

1. Type of brace in accordance with Section 2308.9.3 shall be Method 3 and the allowable shear capacity in accordance with Table 2306.4.1 shall be a minimum of 350 plf (5108 N/m).

2. The bracing of the first story shall be located at each end and at least every 25 feet (7620 mm) o.c. but not less than 45 percent of the braced wall line.

3. Hold-down connectors shall be provided at the ends of braced walls for the first floor to foundation with an allowable design of 2,100 pounds (9341 N).

4. Cripple walls shall not be permitted.

5. Anchored masonry and stone wall veneer shall not exceed 5 inches (127 mm) in thickness, shall conform to the requirements of Chapter 14 and shall not extend more than 5 feet (1524 mm) above the first story finished floor.

Section 2308.12.4 and Table 2308.12.4 of the 2010 Edition of the California Building Code are amended to read as follows:

2308.12.4 Braced wall line sheathing. Braced wall lines shall be braced by one of the types of sheathing prescribed by Table 2308.12.4 as shown in Figure 2308.9.3. The sum of lengths of braced wall panels at each braced wall line shall conform to Table 2308.12.4. Braced wall panels shall be distributed along the length of the braced wall line and start at not more than 8 feet (2438 mm) from each end of the braced wall line. Panel sheathing joints shall occur over studs or blocking. Sheathing shall be fastened to studs, top and bottom plates and at panel edges occurring over blocking. Wall framing to which sheathing used for bracing is applied shall be nominal 2 inch wide [actual $1^1/_2$ inch (38 mm)] or larger members and spaced a maximum of 16 inches on center.

Exception: Braced wall panels required by Section 2308.12.4 may be eliminated when all of the following requirements are met:

1. One story detached Group U occupancies not more than 25 feet in depth or length.

2. The roof and three enclosing walls are solid sheathed with 15/32 inch nominal thickness wood structural panels with 8d common nails placed 3/8 inches from panel edges and spaced not more than 6 inches on center along all panel edges and 12 inches on center along intermediate framing members. Wall openings for doors or windows are permitted provided a minimum 4 foot wide wood structural braced panel with minimum height to length ratio of 2 to 1 is provided at each end of the wall line and that the wall line be sheathed for 50% of its length.

Wood structural panel sheathing shall be a minimum of 15/32 inch thick nailed with 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

Braced wall panel construction types shall not be mixed within a braced wall line.

TABLE 2308.12.4
WALL BRACING IN SEISMIC DESIGN CATEGORIES D AND E
(Minimum Length of Wall Bracing per each 25 Linear Feet of Braced Wall Line [a])

CONDITION	SHEATHING TYPE[b]	$S_{DS} < 0.50$	$0.50 \leq S_{DS} < 0.75$	$0.75 \leq S_{DS} \leq 1.00$	$S_{DS} > 1.00$
One Story	G-P[c]	10 feet 8 inches	14 feet 8 inches	18 feet 8 inches	25 feet 0 inches
	S-W[d]	5 feet 4 inches	8 feet 0 inches	9 feet 4 inches	12 feet 0 inches

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Minimum length of panel bracing of one face of the wall for S-W sheathing shall be at least 4'-0" long or both faces of the wall for G-P sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. For S-W panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half the tabulated value but the h/w ratio shall not exceed 2:1 and design for uplift is required.

b. G-P = gypsum board, portland cement plaster or gypsum sheathing boards; S-W = wood structural panels.

c. Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates and, where occurring, at blocking:
For 1/2-inch gypsum board, 5d (0.113 inch diameter) cooler nails at 7 inches on center;
For 5/8-inch gypsum board, No 11 gage (0.120 inch diameter) cooler nails at 7 inches on center;
For gypsum sheathing board, 1-3/4 inches long by 7/16-inch head, diamond point galvanized nails at 4 inches on center;
For gypsum lath, No. 13 gage (0.092 inch) by 1-1/8 inches long, 19/64-inch head, plasterboard at 5 inches on center;
For Portland cement plaster, No. 11 gage (0.120 inch) by $1^1/_2$ inches long, $^7/_{16}$- inch head at 6 inches on center;

d. S-W sheathing shall be a minimum of 15/32" thick nailed with 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center and 12 inches on center along intermediate framing members.

Section 2304.9.1 and Table 2304.9.1 of the 2010 Edition of the California Building Code are amended to read as follows:

2304.9.1 Fastener requirements. Connections for wood members shall be designed in accordance with the appropriate methodology in Section 2301.2. The number and size of fasteners connecting wood members shall not be less than that set forth in Table 2304.9.1. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

Exception: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

Add new footnote q to Table 2304.9.1.

q. Staples shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

Section 2308.12.5 of the 2010 Edition of the California Building Code are amended to read as follows:

2308.12.5 Attachment of sheathing. Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.12.4 or 2304.9.1. Wall sheathing shall not be attached to framing members by adhesives. Staple fasteners in Table 2304.9.1 shall not be used to resist or transfer seismic forces in structures assigned to Seismic Design Category D, E or F.

Exception: Staples may be used to resist or transfer seismic forces when the allowable shear values are substantiated by cyclic testing and approved by the building official.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches (6096 mm) on center with four 8d nails per leg (total eight 8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum 24 inches (6096 mm) intervals along the top plate of discontinuous vertical framing.

SECTION 15. AMENDMENT OF CODE. Section 9-3.01, Chapter 3, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-3.01 Adoption of California Electrical Code and Chapter 1, Division II of the California Building Code for Administrative Code Provisions for the Electrical Code.

The California Electrical Code, 2010 Edition, published by the National Fire Prevention Association and Chapter 1, Division II of the California Building Code for Administrative Code Provisions, one (1) copy of which is on file in the office of the City Clerk, are hereby adopted as the Electrical Code for the City for the protection of the public health and safety in and for the City and are hereby referred to as the Electrical Code and by this reference expressly incorporated in this chapter and made a part of this chapter as though set forth in this chapter at length, subject to the additions, deletions and amendments set forth in this chapter."

SECTION 16. AMENDMENT OF CODE. Section 9-3.06, Chapter 3, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-3.06 Violation and penalties.

Section 114.4. of said Chapter 1, Division II of the California Building Code for Administrative Code Provisions for the California Electrical Code 2007 is hereby amended to read:

Sec. 114.4. Violation penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or

maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment.

SECTION 17. AMENDMENT OF CODE. Section 9-3.07, Chapter 3, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-3.07 Special provisions.

Section 109.1 of said Chapter 1, Division II (c) of the California Building Code Administrative Provisions is hereby amended to read as follows:

Sec.109.1. Fees.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section 107 of the California Building Code, Chapter 1, Division II a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 109, and are in addition to the permit fees.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

SECTION 18. AMENDMENT OF CODE. Section 9-5.01, Chapter 5, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-5.01 Adoption of the California Plumbing Code.

The California Plumbing Code, 2010 Edition and Chapter 1, Division II, Chapter 13, 15 and Appendix B, D, G, L, published by the International Association of Plumbing and Mechanical Officials, one (1) copy of which is on file in the office of the City Clerk, is hereby adopted as the Plumbing Code for the public health and safety in and for the City and is hereby referred to and by this reference expressly incorporated in this chapter and made a part of this chapter as though set forth in this chapter at length. Subject to the additions, deletions, and amendments set forth in this chapter, said Plumbing Code is hereby established and adopted, and the same shall be known, designated, and referred to as the "Plumbing Code" for the City. "

SECTION 19, AMENDMENT OF CODE. Section 9-5.02, Chapter 5, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-5.02 Cost of permits.

Chapter 1, Division II Section 103.4.1 (c) of said Plumbing Code is hereby amended to

read as follows:

Sec. 103.4.1 Fees.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section 103.4.2, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Subsection 103.4.1 (b), and are in addition to the permit fees.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

SECTION 20. AMENDMENT OF CODE. Section 9-5.03, Chapter 5, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-5.03 Violations: Penalties.

Section 102.3.1 of said Chapter 1, Division II of the California Building Code for Administrative Code Provisions for the California Plumbing Code is hereby amended to read:

Sec. 102.3.1 Violations and Penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment."

SECTION 21. AMENDMENT OF CODE. Section 9-6.01, Chapter 6, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-6.01 Adoption of the California Mechanical Code.

The California Mechanical Code, 2010 Edition and Chapter 1, Division II published by the International Association of Plumbing and Mechanical Organization, one copy of which is on file in the office of the City Clerk, is hereby adopted as the Mechanical Code for the City and is hereby referred to and by this reference expressly incorporated in this chapter and made a part of this chapter as though set forth in this chapter at length. Subject to the additions, deletions, and amendments set forth in this chapter, said Mechanical Code is hereby established and adopted, and the same shall be known, designated, and referred to as the "Mechanical Code" for the City."

SECTION 22. AMENDMENT OF CODE. Section 9-6.03, Chapter 6, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-6.03 Fees.

Chapter 1, Division II Section 115 (c) of said Mechanical Code is hereby amended to read:

Sec. 115.2. Fees.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section 115.3, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Subsection 115.2, and are in addition to the permit fees.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

SECTION 23. AMENDMENT OF CODE. Section 9-6.04, Chapter 6, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-6.04 Violations: Penalties.

Chapter 1, Division II of said Mechanical Code is hereby amended to read:

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment."

SECTION 24. AMENDMENT OF CODE. Section 9-18.01, Chapter 18, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-18.01 Adoption of Appendix H of the California Building Code.

The construction of signs shall be per Appendix H of the California Building Code and Chapter 1 Division II, published by the International Code Council, one copy of which is on file in the office of the City Clerk, is hereby adopted as the Sign Code for the City and is hereby referred to and by this reference expressly incorporated in this chapter and made a part of this chapter as though set forth in this chapter at length. Subject to the additions, deletions, and amendments set forth in this chapter, said Sign Code is hereby established and adopted, and the same shall be known, designated, and referred to as the "Sign Code" for the City."

SECTION 25. AMENDMENT OF CODE. Section 9-18.02, Chapter 18, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-18.02 Fees.

Section 109.1 of the California Building Code and Chapter 1, Division II (c) is hereby amended to read as follows:

Sec. 109.1. Fees.

(c) Plan Review Fees. When a plan or other data is required to be submitted as determined by the Building Official, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Subsection 109.1, and are in addition to the permit fees.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code,

SECTION 26. AMENDMENT OF CODE. Section 9-18.03, Chapter 18, Title 9, of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-18.03 Violations: Penalties.

Section 114.4 of the California Building Code and Chapter 1, Division II is hereby amended to read:

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment."

SECTION 27. AMENDMENT OF CODE. The following Chapter 22 is hereby added to Title 9 of the Redondo Beach Municipal Code as follows:

"Chapter 22

Residential Building Code

Sections:

9-22.06 Certificate of occupancy

9-22.07 Violations and penalties

9-22.08 Fire extinguishing systems

9-22.09 Special seismic provisions

"9-22.01 Adoption of California Residential Code, Part 2.5.

Those certain documents, one copy of which is on file in the office of the City Clerk, being marked and designated as the 2010 California Residential Code, Part 2.5, Chapter 1, Division II, be and the same are hereby adopted as the Code of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of one- and two-family dwellings and townhouses and there accessory structures in the City; providing for the issuance of permits and all collection of fees therefore; and providing penalties for violations of such Code; and each and all of the regulations, provisions, penalties, conditions, and terms of such " 2010 California residential Code,Chapter 1, Division II are hereby referred to, adopted, and made a part of this chapter as if fully set forth in this chapter, subject to the additions, deletions, and amendments set forth in this chapter."

"9-22.02 Intentionally left blank."

"9-22.03 Permit required.

Section R105.1 of the California Residential Code, Chapter 1, Division II is hereby amended as follows:

R105.1 Permits Required. Except as specified in Section R105.2 of this Section, no building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate permit for each building or structure has first been obtained from the building official.

For work with a valuation listed at Fifty Thousand and no/100ths ($50,000.00) Dollars or more the permit must be obtained by a contractor licensed in the state of California or for single family dwellings less than two units the permit may be obtained by the owner using licensed sub-contractors.

An Engineering permit is required prior to commencement of sandblasting work. Additionally, applicant must post a refundable cash deposit of Two Hundred and no/100ths ($200.00) Dollars for each single family dwelling. Contractor is required to comply with all the requirements of the National Pollutant Discharge Elimination System (NPDES). The sandblasting must be wet sandblasting, and all the precautionary measures must be taken by the contractor to protect life and property of neighbors, residents and the public. Adjacent property owners must be notified at least two (2) days prior to sandblasting."

Section R105.2 of the California Residential Code, Chapter 1, Division II is hereby amended as follows:

R105.2 Work Exempt from Permit. Permits shall not be required for the following:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet ($11m^2$),
2. Wood fences not exceeding 6 feet (1829mm) in height including concrete or masonry pilasters unless fence is built on slope and retains earth, and masonry and concrete fences that are not over 5 feet (1524mm) in height unless built on a slope or retaining earth.
3. Oil derricks.
4. Retaining walls which are not over 4 feet (1219mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II, or III-A liquids.
5. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
6. Platforms, decks, walks and driveways not more than 30 inches (762mm) above adjacent grade and not over any basement or story below and are not part an accessible.
7. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3, Occupancy that are less than 18 inches (457.5 mm) deep, do not exceed 5,000 gallons (18927 L) and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
12. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R- 3 and U Occupancies.
13. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction."

"Section R105.5 of the California Residential Code, Chapter 1, Division II is hereby amended as follows:

Section R105.5 Expiration. Notwithstanding any provisions of this Code to the contrary, every permit issued by the Building Official under the provisions of this code shall expire by limitation and become null and void if the building or work authorized by such permit is not completed, in accordance with the provisions of this Code, within two (2) years from the date of such permit. Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefore shall be the amount required for a new permit for such work, provided (a) no changes have been made and/or will be made in the original plans and specifications for such work; (b) such suspension or abandonment has not exceeded one year; and (c) the building

or work authorized by the new permit shall comply with the current code provisions in effect on the date of issuance of such permit."

"9-22-.04 Intentional left blank."

"9-22.05 Fees.

Section R108.2 of said California Residential Code Chapter 1, Division II is hereby amended to read as follows:

Sec. R108.2 Fees.

(a) General. Fees shall be assessed in accordance with the provisions of this section.

(b) Permit Fees. The fee for each permit shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach City Municipal Code.

The determination of value or valuation under any of the provisions of this code shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finished work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment. The determination of value or valuation for residential remodels shall be 65 percent of the new cost of construction.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section R106, of the California Residential Code, Chapter 1, Division II a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 108.2, and are in addition to the permit fees.

The Building Official may modify plan review fees and requirements in accordance with Section R108.2.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

(d) Expiration of Plan Review.

Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter by returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding 180 days on written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. Application may be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee at 25 percent of the original plan review fee, if there are no code updates or changes to original plan submittal.

(e) Investigation Fees. Work without a Permit

1. Investigation. Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

2. Fee. An investigation fee, in addition to the permit fee, shall be collected whether

or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The minimum investigation fee shall be the same as the minimum fee set forth in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

(f) Fee Refunds. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment."

"Section 9-22.06 Certificate of occupancy.

Section R110.3 of said California Residential Code Chapter 1, Division II is hereby amended to read as follows:

Section R110.3 Certificate issued. The finaled building permit shall act as the certificate of occupancy.

"9-22.07 Violations and penalties.

Section R113.4 of said California Residential Code Chapter 1, Division II is hereby amended to read as follows:

Sec. R113.4 Violation penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment."

"9-22.08 Fire extinguishing systems.

Section R313.1 of said California Residential Code is hereby amended to read as follows:

R313.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler shall be installed in townhouses.

Exception: An automatic residential fire sprinkler system shall be required when additions or alterations of more than a 750 square feet addition and/or an additional story is added to the existing townhouses that do not have an automatic residential fire

sprinkler system installed.

Section R313.2 of said California Residential Code is hereby amended to read as follows:

R313.2 One- and Two- family dwellings automatic fire sprinkler systems. An automatic residential fire sprinkler shall be installed in one and two family dwellings.

Exception: An automatic residential fire sprinkler system shall be required when additions or alterations of more than a 750 square feet addition and/or an additional story is added to the existing one- and two- family dwellings that do not have an automatic residential fire sprinkler system installed."

"9-22.09 Special seismic provisions.

Section R301.1.3.2 of the 2010 Edition of the California Residential Code is amended to read as follows:

R301.1.3.2 Woodframe structures. The building official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than two stories and basement in height located in Seismic Design Category A, B or C. Notwithstanding other sections the law, the law establishing these provisions is found in Business and Professions Code Section 5537 and 6737.1.

The building official shall require construction documents to be approved and stamped by a California licensed architect or engineer for all dwellings of woodframe construction more than one story in height or with a basement located in Seismic Design Category D_0, D_1, D_2 or E.

Section R301.1.4 is added to Chapter 3 of the 2010 Edition of the California Residential Code to read as follows:

R301.1.4 Seismic design provisions for buildings constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope). The design and construction of new buildings and additions to existing buildings when constructed on or into slopes steeper than one unit vertical in three units horizontal (33.3 percent slope) shall comply with Section 1613.12 of the California Building Code.

Section R301.2.2.2.5 of the 2010 Edition of the California Residential Code is amended to read as follows:

1. When exterior shear wall lines or braced wall panels are not in one plane vertically from the foundation to the uppermost story in which they are required.

3. When the end of a braced wall panel occurs over an opening in the wall below.

6. When portions of a floor level are vertically offset.

Section R301.2.2.3.5.1 is added to Section 301.2.2.3.5 of the 2010 Edition of the California Residential Code as follows:

R301.2.2.3.5.1 AISI S230, Section B1. Modify AISI S230, Section B1 to read as follows:

Where No. 8 screws are specified, the required number of screws in a steel-to-steel connection shall be permitted to be reduced in accordance with the reduction factors in Table B1-1 when

larger screws are used or when the sheets of steel being connected is thicker than 33 mils (0.84mm). When applying the reduction factor, the resulting number of screws shall be rounded up.

Section R322.1.4.1 of the 2010 Edition of the California Residential Code is amended to read as follows:

R322.1.4.1 Determination of design flood elevations. If design flood elevations are not specified, the building official is authorized to require the applicant to:

1. Obtain and reasonably use data available from a federal, state or other source; or
2. Determine the design flood elevation in accordance with accepted hydrologic and hydraulic undertaken by a registered civil engineer who shall determine that the technical methods used reflect currently accepted engineering practice. Studies, analyses and computations shall be submitted insufficient detail to allow thorough review and approval.

Section R401.1 of the 2010 Edition of the California Residential Code is amended to read as follows:

R401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for all buildings. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding as established by Table R301.2(1) shall meet the provisions of Section R322. Wood foundations shall be designed and installed in accordance with AF&PA PWF.

Exception: The provisions of this chapter shall be permitted to be used for wood foundations only in the following situations:
1. In buildings that have no more than two floors and a roof.
2. When interior basement and foundation walls are constructed at intervals not exceeding 50 feet

(15 240 mm).

Wood foundations in Seismic Design Category D_0, D_1 or D_2 shall not be permitted.

Exception: In non-occupied, single-story, detached storage sheds and similar uses other than carport or garage, provided the gross floor area does not exceed 200 square feet, the plate height does not exceed 12 feet in height above the grade plane at any point, and the maximum roof projection does not exceed 24 inches.

Sections R403.1.2, R403.1.3, R403.1.5 of the 2010 Edition of the California Residential Code are amended to read as follows:

R403.1.2 Continuous footing in Seismic Design Categories D_0, D_1 and D_2. The braced wall panels at exterior walls of buildings located in Seismic Design Categories D_0, D_1 and D_2 shall be supported by continuous footings. All required interior braced wall panels in buildings shall be supported by continuous footings.

R403.1.3 Seismic reinforcing. Concrete footings located in Seismic Design Categories D_0, D_1 and D_2, as established in Table R301.2(1), shall have minimum reinforcement. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

In Seismic Design Categories D_0, D_1 and D_2 where construction joint is created between a concrete footing and a stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing, have a standard hook and extend a minimum of 14 inches (357 mm) into the stem wall.

In Seismic Design Categories D_0, D_1 and D_2 where a grouted masonry stem wall is supported on a concrete footing and stem wall, a minimum of one No. 4 bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall extend to 3 inches (76 mm) clear of the bottom of the footing and have a standard hook.

In Seismic Design Categories D_0, D_1 and D_2 masonry stem walls without solid grout and vertical reinforcing are not permitted.

Exception: In detached one- and two-family dwellings located in Seismic Design Category A, B or C which are three stories or less in height and constructed with stud bearing walls, plain concrete footings without longitudinal reinforcement supporting walls and isolated plain concrete footings supporting columns or pedestals are permitted.

R403.1.5 Slope. The top surface of footings shall be level. The bottom surface of footings shall be permitted to have a slope not exceeding one unit vertical in 10 units horizontal (10-percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in 10 units horizontal (10-percent slope).

For structures located in Seismic Design Categories D_0, D_1 or D_2, stepped footings shall be reinforced with four 1/2-inch diameter (12.7 mm) deformed reinforcing bars. Two bars shall be place at the top and bottom of the footings as shown in Figure R403.1.5.

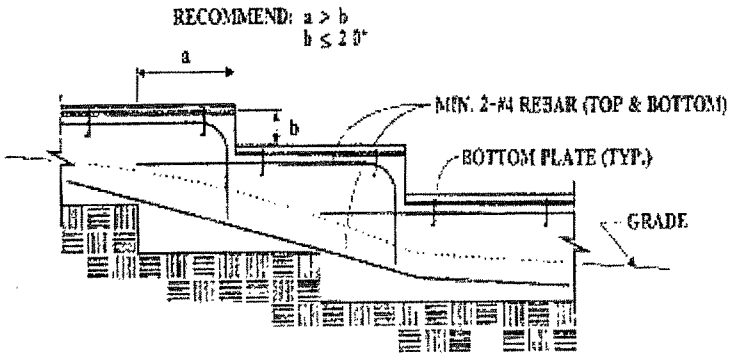


FIGURE R403.1.5
STEPPED FOOTING

Section R404.2 of the 2010 Edition of the California Residential Code is amended to read as follows:

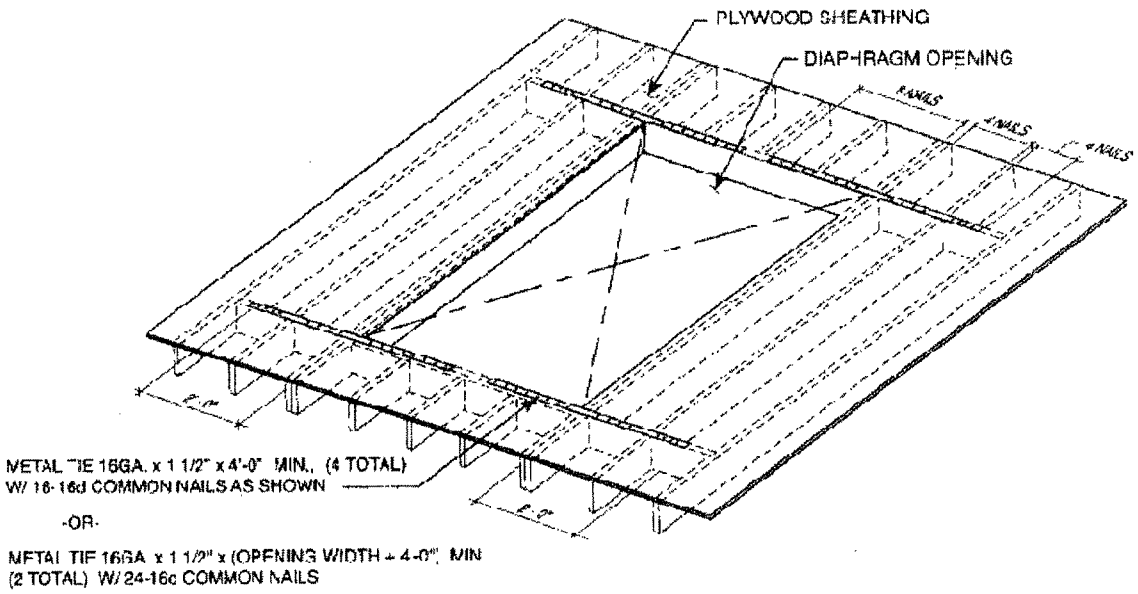
R404.2 Wood foundation walls. Wood foundation walls shall be constructed in accordance with the provisions of Sections R404.2.1 through R404.2.6 and with the details shown in Figures R403.1(2) and R403.2(3). Wood foundation walls shall not be used for structures located in Seismic Design Category D_0, D_1 or D_2.

Section R501.1 of the 2010 Edition of the California Residential Code is amended to read as follows:

R501.1 Application. The provision of this chapter shall control the design and construction of the floors for all buildings including the floors of attic spaces used to house mechanical or plumbing fixtures and equipment weighing less than 400 lbs and maximum height of 4 feet above the floor or attic level.

Section R503.2.4 is added to Chapter 5 of the 2010 Edition of the California Residential Code to read as follows:

R503.2.4 Openings in horizontal diaphragms. Openings in horizontal diaphragms with a dimension perpendicular to the joist that is greater than 4 feet (1.2 m) shall be constructed in accordance with Figure R503.2.4.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Blockings shall be provided beyond headers.
b. Metal ties not less than 0.058 inch [1.47 mm (16 galvanized gage)] by 1.5 inches (38 mm) wide with eight 16d common nails on each side of the header-joist intersection. The metal ties shall have a minimum yield of 33,000 psi (227 MPa).
c. Openings in diaphragms shall be further limited in accordance with Section R301.2.2.2.5.

FIGURE R503.2.4
OPENINGS IN HORIZONTAL DIAPHRAGMS

Lines 34 thru 37 of Table R602.3(1) of the 2010 Edition of the California Residential Code are amended to read as follows:

Other wall sheathing[h]				
34	1/2" structural cellulosic fiberboard sheathing	1/2" galvanized roofing nail; ~~7/16" crown or 1" crown staple 16 ga., 1 1/4" long~~	3	6
35	25/32" structural cellulosic fiberboard sheathing	1 3/4" galvanized roofing nail; ~~7/16" crown or 1" crown staple 16 ga., 1 1/2" long~~	3	6
36	1/2" gypsum sheathing[d]	1 1/2" galvanized roofing nail; ~~staple galvanized, 1 1/2" long;~~ 1 1/4 screws, Type W or S	7	7
37	5/8" gypsum sheathing[d]	1 3/4" glavanized roofing nail; ~~staple galvanized, 1 5/8" long;~~ 1 5/8" screws, Type W or S	7	7

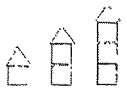
Table R602.3(2) of the 2010 Edition of the California Residential Code is amended to read as follows:

Wood structural panels subfloor, roof and wall sheathing to framing and particleboard wall sheathing to framing[f]			
up to 1/2	~~Staple 15 ga. 1 3/4~~	~~4~~	~~8~~
	0.097 - 0.099 Nail 2 1/4	3	6
	~~Staple 16 ga. 1 3/4~~	~~3~~	~~6~~
19/32 and 5/8	0.113 Nail 2	3	6
	~~Staple 15 and 16 ga. 2~~	~~4~~	~~8~~
	0.097 - 0.099 Nail 2 1/4	4	8
23/32 and 3/4	~~Staple 14 ga. 2~~	~~4~~	~~8~~
	~~Staple 15 ga. 1 3/4~~	~~3~~	~~6~~
	0.097 - 0.099 Nail 2 1/4	4	8
	~~Staple 16 ga. 2~~	~~4~~	~~8~~
1	~~Staple 14 ga. 2 1/4~~	~~4~~	~~8~~
	0.113 Nail 2 1/4	3	6
	~~Staple 15 ga. 2 1/4~~	~~4~~	~~8~~

Floor underlayment: plywood-hardboard-particleboard[f]			
Plywood			
1/4 and 5/16	1 1/4 ring or screw shank nail-minimum 12 1/2 ga. (0.099") shank diameter	3	6
	~~Staple 18 ga., 7/8, 3/16 crown width~~	~~2~~	~~5~~
11/32, 3/8, 15/32, and 1/2	1 1/4 ring or screw shank nail-minimum 12 1/2 ga. (0.099") shank diameter	6	8[e]
19/32, 5/8, 23/32 and 3/4	1 1/2 ring or screw shank nail-minimum 12 1/2 ga. (0.099") shank diameter	6	8
	~~Staple 16 ga. 1 1/2~~	~~6~~	~~8~~

Table R602.10.1.2(2) of the 2010 Edition of the California Residential Code is amended to read as follows:

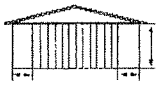
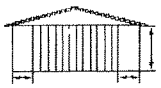
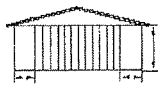
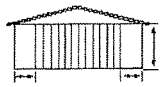
TABLE R602.10.1.2(2)[a, b, c]
BRACING REQUIREMENTS BASED ON SEISMIC DESIGN CATEGORY
(AS A FUNCTION OF BRACED WALL LINE LENGTH)

SOIL CLASS D[a] WALL HEIGHT = 10 FT 10 PSF FLOOR DEAD LOAD 15 PSF ROOF/CEILING DEAD LOAD BRACED WALL LINE SPACING ≤ 25 FT			MINIMUM TOTAL LENGTH (feet) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE			
Seismic Design Category (SDC)	Story Location	Braced Wall Line Length	Method LIB	Methods[d] DWB, SFB, GB, PBS, PCP, HPS	Method WSP	Continuous Sheathing
SDC D_0 or D_1		10	NP	~~3.0~~ 6.0	2.0	1.7
		20	NP	~~6.0~~ 12.0	4.0	3.4
		30	NP	~~9.0~~ 18.0	6.0	5.1
		40	NP	~~12.0~~ 24.0	8.0	6.8
		50	NP	~~15.0~~ 30.0	10.0	8.5
		10	NP	~~6.0~~ NP	4.5	3.8
		20	NP	~~12.0~~ NP	9.0	7.7
		30	NP	~~18.0~~ NP	13.5	11.5
		40	NP	~~24.0~~ NP	18.0	15.3
		50	NP	~~30.0~~ NP	22.5	19.1
		10	NP	~~8.5~~ NP	6.0	5.1
		20	NP	~~17.0~~ NP	12.0	10.2
		30	NP	~~25.5~~ NP	18.0	15.3
		40	NP	~~34.0~~ NP	24.0	20.4
		50	NP	~~42.5~~ NP	30.0	25.5
SDC D_2		10	NP	~~4.0~~ 8.0	2.5	
		20	NP	~~8.0~~ 16.0	5.0	
		30	NP	~~12.0~~ 24.0	7.5	
		40	NP	~~16.0~~ 32.0	10.0	
		50	NP	~~20.0~~ 40.0	12.5	
		10	NP	~~7.5~~ NP	5.5	
		20	NP	~~15.0~~ NP	11.0	
		30	NP	~~22.5~~ NP	16.5	
		40	NP	~~30.0~~ NP	22.0	
		50	NP	~~37.5~~ NP	27.5	
		10	NP	NP	NP	
		20	NP	NP	NP	
		30	NP	NP	NP	
		40	NP	NP	NP	
		50	NP	NP	NP	

d. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D_0, D_1, and D_2. Methods DWB, SFB, PBS, and HPS are not permitted in SDC D_0, D_1, and D_2.

Table R602.10.2 of the 2010 Edition of the California Residential Code is amended to read as follows:

TABLE R602.10.2
INTERMITTENT BRACING METHODS[a]

				8d common (2 ½" x 0.131) nails at 6" spacing (panel edge) at 12" spacing (intermediate supports), 3/8" edge distance to panel edge
WSP	Wood structural panel (see Section R604)	$\frac{3}{8}$" 15/32"		~~For exterior/interior sheathing see Table R602.3(3) For interior sheathing see Table R602.3(1)~~
SFB	Structural fiberboard sheathing	$\frac{1}{2}$" or $\frac{25}{32}$" for maximum 16" stud spacing		$1\frac{1}{2}$" galvanized roofing nails or 8d common ($2\frac{1}{2}$" x 0.131) nails at 3" spacing (panel edges) at 6" spacing (intermediate supports)
GB	Gypsum board	$\frac{1}{2}$"		Nails or screws at 7" spacing at panel edges including top and bottom plates; for all braced wall panel locations for exterior sheathing nail or screw size, see Table R602.3(3); for interior gypsum board nail or screw size, see Table R702.3.5
PBS	Particleboard sheathing (see Section R605)	$\frac{3}{8}$" or $\frac{1}{2}$" for maximum 16" stud spacing		$1\frac{1}{2}$" galvanized roofing nails or 8d common ($2\frac{1}{2}$" x 0.131) nails at 3" spacing (panel edges) at 6 spacing (intermediate supports)
PCP	Portland cement plaster	See Section R703.6 For maximum 16" stud spacing		$1\frac{1}{2}$", 11 gage, $\frac{7}{16}$" head nails at 6" spacing ~~or $\frac{7}{8}$", 16 gage staples at 6" spacing~~

a. Methods GB and PCP braced wall panel h/w ratio shall not exceed 1:1 in SDC D_0, D_1, and D_2. Methods LIB, DWB, SFB, PBS, HPS, and PFG are not permitted in SDC D_0, D_1, and D_2.

Figure R602.10.3.2 of the 2010 Edition of the California Residential Code is amended to read as follows:

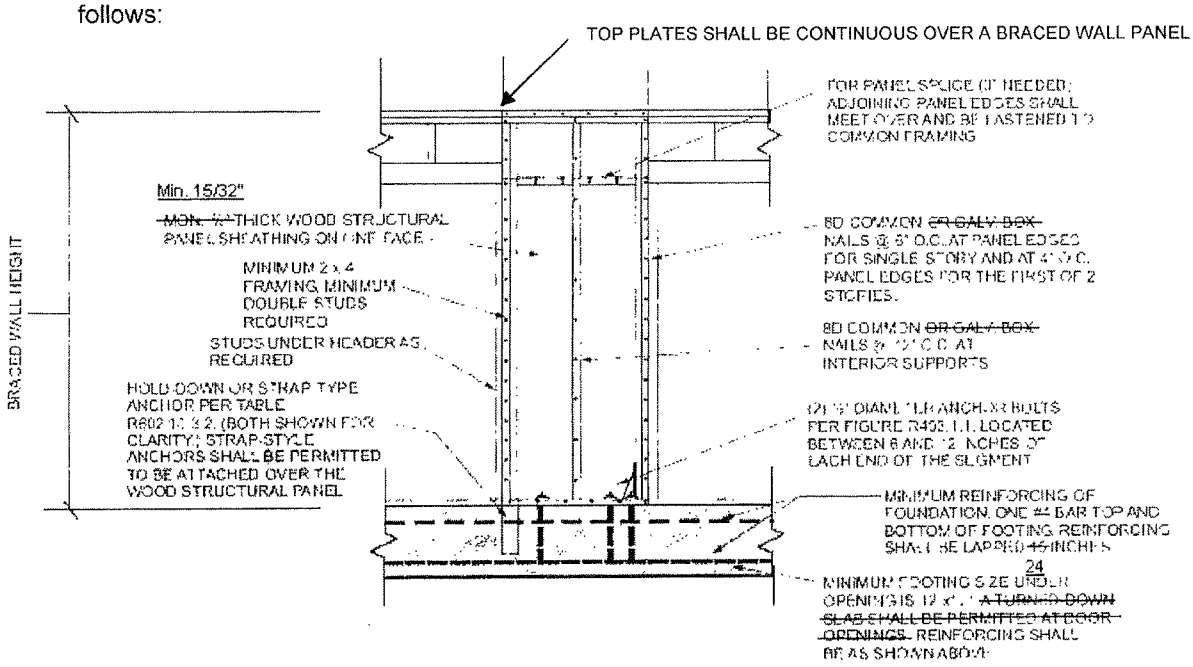


FIGURE R602.10.3.2
ALTERNATE BRACED WALL PANEL

Figure R602.10.3.3 of the 2010 Edition of the California Residential Code is amended to read as follows:

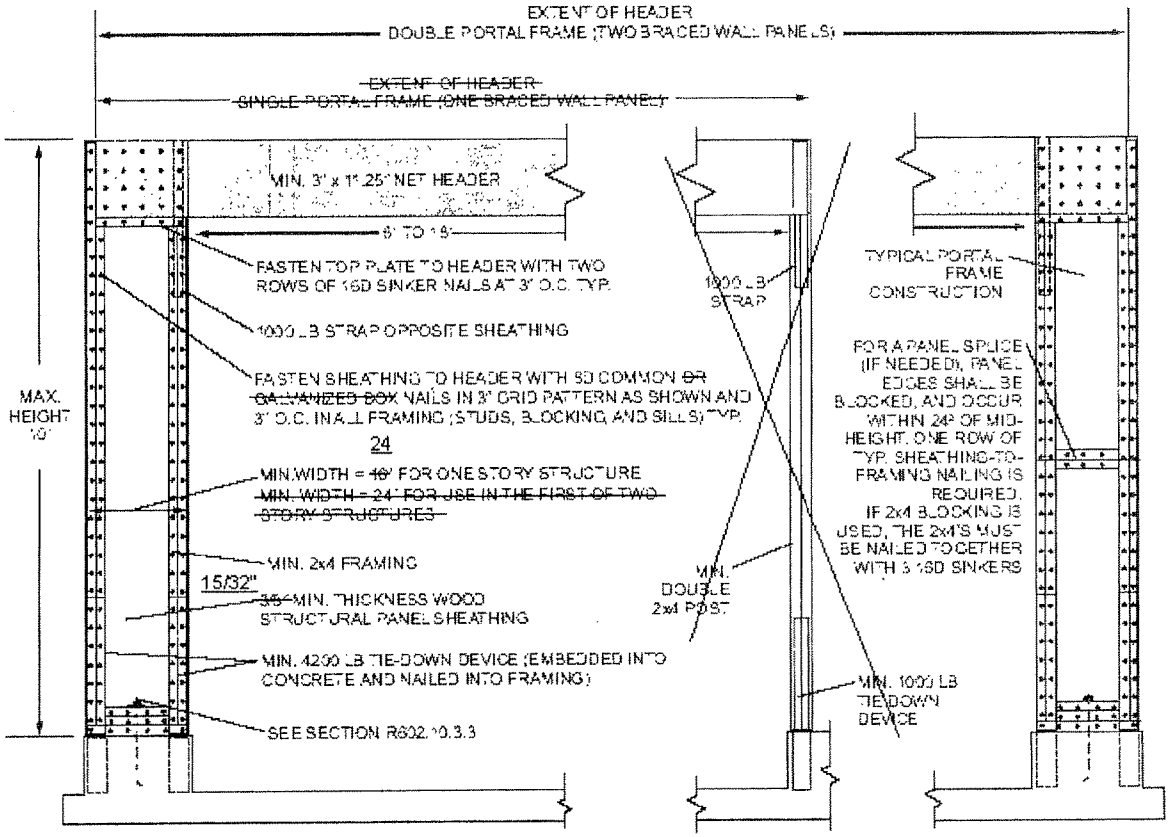


FIGURE R602.10.3.3
METHOD PFH: PORTAL FRAME WITH HOLD-DOWNS AT DETACHED GARAGE DOOR OPENINGS

Item 1 of Section R602.10.3.3 of the 2010 Edition of the California Residential Code is amended to read as follows:

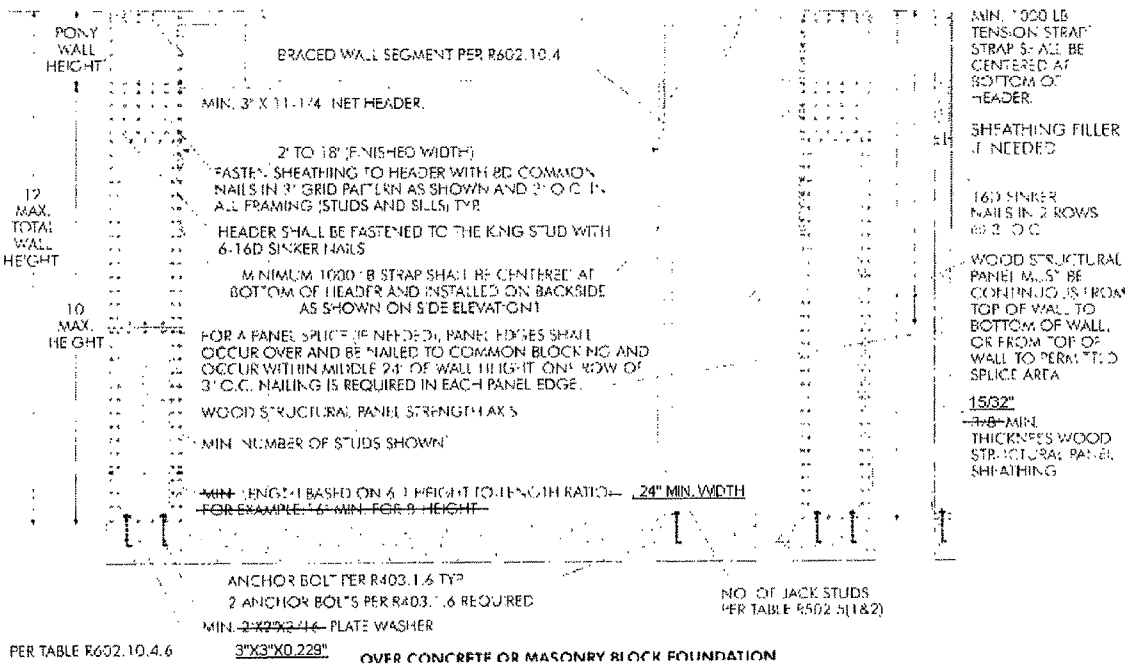
1. Each panel shall be fabricated in accordance with Figure R602.10.3.3. The wood structural panel sheathing shall extend up over the solid sawn or glued-laminated header and shall be nailed in accordance with Figure R602.10.3.3. A spacer, if used with a built-up header, shall be placed on the side of the built-up beam opposite the wood structural panel sheathing. The header shall extend between the inside faces of the first full-length outer studs of each panel. One anchor bolt not less than 5/8-inch-diameter (16 mm) and installed in accordance with Section R403.1.6 shall be provided in the center of each sill plate. The hold-down devices shall be an embedded-strap type, installed in accordance with the manufacturer's recommendations. The panels shall be supported directly on a foundation that is continuous across the entire length of the braced wall line. The foundation shall be reinforced as shown on Figure R602.10.3.2. This reinforcement shall be lapped not less than ~~15~~24 inches (~~381~~ 610 mm) with the reinforcement required in the continuous foundation located directly under the braced wall line.

Table R602.10.4.1 of the 2010 Edition of the California Residential Code is amended to read as follows:

TABLE R602.10.4.1
CONTINUOUS SHEATHING METHODS

METHOD	MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA
CS-WSP	Wood structural panel	15/32" ~~3/8"~~	8d	~~6d~~ common (2" × 0.113") nails at 6" spacing (panel edges) and at 12" spacing (intermediate supports) ~~or 16 ga. × 1 3/4 staples at 3" spacing (panel edges) and 6" spacing (intermediate supports)~~
CS-G	Wood structural panel adjacent to garage openings and supporting roof load only[a,b]	15/32" ~~3/8"~~		See Method CS-WSP
CS-PF	Continuous portal frame	See Section R602.10.4.1.1		See Section R602.10.4.1.1

Figure R602.10.4.1.1 of the 2010 Edition of the California Residential Code is amended to read as follows:



Section R602.10.7.1 of the 2010 Edition of the California Residential Code is deleted in its entirety:

Section R606.2.4 of the 2010 Edition of the California Residential Code is amended to read as follows:

R606.2.4 Parapet walls. Unreinforced solid masonry parapet walls shall not be less than 8 inches (203 mm) thick and their height shall not exceed four times their thickness. Unreinforced hollow unit masonry parapet walls shall be not less than 8 inches (203 mm) thick, and their height shall not exceed three times their thickness. Masonry parapet walls in areas subject to wind loads of 30 pounds per square foot (1.44 kPa) or located in Seismic Design Category D_0, D_1 or D_2, or on townhouses in Seismic Design Category C shall be reinforced in accordance with Section R606.12.

Section R606.12.2.2.3 of the 2010 Edition of the California Residential Code is amended to read as follows:

R606.12.2.2.3 Reinforcement of requirements for masonry elements. Masonry elements listed in Section R606.12.2.2.2 shall be reinforced in either the horizontal or vertical direction as shown in Figure R606.11(3) and in accordance with the following:

1. Horizontal reinforcement. Horizontal joint reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Horizontal reinforcement shall be provided within 16 inches (406 mm) of the top and bottom of these masonry elements.

2. Vertical reinforcement. Vertical reinforcement shall consist of at least one No. 4 bar spaced not more than 48 inches (1219 mm). Vertical reinforcement shall be within 8 inches (406mm) of the ends of masonry walls.

Exception of Section 602.3.2 of the 2010 Edition of the California Residential Code is amended to read as follows:

Exception: In other than Seismic Design Category D_0, D_1 or D_2, a single top plate may be installed in stud walls, provided the plate is adequately tied at joints, corners and interesting walls by a minimum 3-inch-by-6-inch by a 0.036-inch-thick (76 mm by 152 mm by 0.914 mm) galvanized steel plate that is nailed to each wall or segment of wall by six 8d nails on each side, provided the rafters or joists are centered over the studs with a tolerance of no more than 1 inch (25 mm). The top plate may be omitted over lintels that are adequately tied to adjacent wall sections with steel plates or equivalent as previously described.

Footnote "i" is added to Table R802.5.1(9) of the 2010 Edition of the California Residential Code to read as follows:

i. Edge distances, end distances and spacings for nails shall be sufficient to prevent splitting of the wood.

Section R802.8 of the 2010 Edition of the California Residential Code is amended to read as follows:

R802.8 Lateral support. Roof framing members and ceiling joists having a depth-to-thickness ratio exceeding 2 to 1 based on nominal dimensions shall be provided with lateral support at points of bearing to prevent rotation. For roof rafters with ceiling joists attached per Table R602.3(1), the depth-thickness ratio for the total assembly shall be determined using the combined thickness of the rafter plus the attached ceiling joist.

Section R802.10.2 of the 2010 Edition of the California Residential Code is amended to read as follows:

R802.10.2 Design. Wood trusses shall be designed in accordance with accepted engineering practice. The design and manufacture of metal-plate-connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional.

Section R803.2.4 is added to Chapter 8 of the 2010 Edition of the California Residential Code to read as follows:

R803.2.4 Openings in horizontal diaphragms. Openings in horizontal diaphragms shall conform with Section R503.2.4.

Section R1001.3.1 of the 2010 Edition of the California Residential Code is amended to read as follows:

R1001.3.1 Vertical reinforcing. For chimneys up to 40 inches (1016 mm) wide, four No. 4 continuous vertical bars adequately anchored into the concrete foundation shall be placed between wythes of solid masonry or within the cells of hollow unit masonry and grouted in accordance with Section R609. Grout shall be prevented from bonding with the flue liner so that the flue liner is free to move with thermal expansion. For chimneys more than 40 inches (1016 mm) wide, two additional No. 4 vertical bars adequately anchored into the concrete foundation shall be provided for each additional flue incorporated into the chimney or for each additional 40 inches (1016 mm) in width or fraction thereof.

SECTION 28. AMENDMENT OF CODE. The following Chapter 23is hereby added to Title 9 of the Redondo Beach Municipal Code to read as follows:

"Chapter 23

Green Building Standards

Sections:

"9-23.01 Adoption of California Green Building Standards Code (CALGreen), Part 11.

Those certain documents, one copy of which is on file in the office of the City Clerk, being marked and designated as the 2010 California Green Building Standards Code (CALGreen), Part 11, be and the same are hereby adopted as the Code of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and/or structures in the City; providing for the issuance of permits and all collection of fees therefore; and providing penalties for violations of such Code; and each and all of the regulations, provisions, penalties, conditions, and terms of such " 2010 California Green Building Standards Code (CALGreen), Part 11 are hereby referred to, adopted, and made a part of this chapter as if fully set forth in this chapter, subject to the additions, deletions, and amendments set forth in this chapter."

"9-23.02 Fees.

(a) General. Fees shall be assessed in accordance with the provisions of this section.

(b) Permit Fees. The fee for each permit shall be set as in the current Master Fee

Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach City Municipal Code.

(c) The CALGreen fee shall be 10 percent of the permit fee.

(d) For voluntary compliance with Tier 1 measures a 5 percent refund of the CALGreen fee shall issued.

(e) For voluntary compliance with Tier 2 measures a full refund of the CALGreen fee shall issued.

The determination of value or valuation under any of the provisions of this code shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finished work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment.

(f) Plan Review Fees. When a plan or other data are required to be submitted by Section 107, of the California Building Code, Chapter 1, Division II a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are included with the permit fees specified in Section 109.1.

The Building Official may modify plan review fees and requirements in accordance with Section 109.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

(g) Fee Refunds. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment."

"9-23.03 Violations and penalties.

Section. 9-23.03 Violation penalties.
It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment."

"9-23.04 Special provisions.

Section 101.10 of the 2010 Edition of the California Green Building Standards Code is amended

to read as follows:

101.10 Mandatory and voluntary requirements. This code contains both mandatory and voluntary green building measures. Mandatory and voluntary measures are identified in the appropriate application checklist contained in this code. The mandatory measures of Chapter 4 and voluntary measures of Appendix A4 shall apply to new low-rise residential buildings. The mandatory measures of Chapter 5 and voluntary measures of Appendix A5 shall apply to all buildings which are not low-rise residential buildings.

Section 202 of the 2010 Edition of the California Green Building Standards Code is amended to read as follows:

LOW-RISE RESIDENTIAL BUILDING. A building that is of Occupancy Group R and is six stories or less, or that is a one- or two-family dwelling or townhouse.

Section 202 of the 2010 Edition of the California Green Building Standards Code is amended to read as follows:

SUSTAINABILITY. Consideration of present development and construction impacts on the community, the economy, and the environment without compromising the needs of the future.

Section 4.304.1 of the 2010 Edition of the California Green Building Standards Code is amended to read as follows:

4.403.1 Irrigation controllers. Automatic irrigation system controllers for landscaping provided and installed at the time of final inspection and shall comply with the following:

1. Controllers shall be weather- or soil moisture-based controllers that automatically adjust irrigation in response to changes in plants' needs as weather conditions change.
2. Weather-based controllers without integral rain sensors or communication systems that account for local rainfall shall have a separate wired or wireless rain sensor which connects or communicates with the controller(s). Soil moisture-based controllers are not required to have rain sensor input.

Section 4.408 of the 2010 Edition of the California Green Building Standards Code is amended to read as follows:

Construction waste reduction, disposal and recycling shall be per Section 5-2.7 of the City of Redondo Beach Municipal Code."

SECTION 29. INCONSISTENT PROVISIONS. Any provision of the Redondo Beach Municipal Code, or appendices thereto, or any other ordinances of the City inconsistent herewith, to the extent of such inconsistencies and no further, are hereby repealed.

SECTION 30. SEVERANCE. If any section, subsection, sentence, clause, or phrase of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the ordinance. The City Council hereby declares that it would have passed this ordinance and each section, subsection, sentence, clause, and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared invalid or unconstitutional.

SECTION 31. PUBLICATION AND EFFECTIVE DATE. This ordinance shall be published by one insertion in the official newspaper of said city and same shall go into effect and be in full force and operation from and after thirty (30) days after its final passage and adoption.

PASSED, APPROVED, AND ADOPTED this 7th day of December, 2010.

Mike Gin, Mayor

ATTEST:

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS
CITY OF REDONDO BEACH)

I, Eleanor Manzano, City Clerk of Redondo Beach, California, do hereby certify that the foregoing Ordinance No. 3064-10 was duly introduced at a regular meeting of the City Council held on the 16th day of November, 2010, and was duly approved and adopted at a regular meeting of said City Council held on the 7th day of December, 2010, by the following vote:

AYES: ASPEL, BRAND, AUST, DIELS, KILROY

NOES: NONE

ABSENT: NONE

ABSTAIN: NONE

Eleanor Manzano, City Clerk

APPROVED AS TO FORM:

Michael W. Webb, City Attorney

The Beach Reporter
400 S Sepulveda Ste 247
Manhattan Beach CA 90266

Proof of Publication

(2015.5 C.C.P)

STATE OF CALIFORNIA,
COUNTY OF LOS ANGELES

I am a citizen of the United States, and a resident of the county aforesaid; I am over the age of eighteen years; and I am not a party to or interested in the notice published. I am the chief legal advertising clerk of the publisher of the

BEACH REPORTER

a newspaper of general circulation, printed and

published **Weekly**

in the City of **Manhattan Beach**
County of Los Angeles, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California,

under the date of **December 29,** 19 **83**

Case Number **C 474258**
that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

December 16, 2010

all in the year 20 **10**
I certify (or declare) under penalty of perjury that the foregoing is true and correct

Dated at **Manhattan Beach**

California, this **16th** **December** 20 **10**

Signature

This Space is for the County Clerk's Filing Stamp

Proof of Publication of

Paste Clipping
Of Notice
SECURELY
In This Space

LEGALS • LEGALS • LEGALS • LEGALS • LEGALS

PUBLIC NOTICE | PUBLIC NOTICE | PUBLIC NOTICE | PUBLIC NOTICE | PUBLIC NOTICE | PUBLIC NOTICE

ORDINANCE NO. 3064-10

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, AMENDING CERTAIN PROVISIONS OF CHAPTER 4, TITLE 3 AND TITLE 9 OF THE REDONDO BEACH MUNICIPAL CODE, AND ADOPTING THE 2009 INTERNATIONAL FIRE CODE, WHICH INCORPORATES THE 2010 CALIFORNIA AMENDMENTS, THE 2010 TITLE 24 CALIFORNIA CODE OF REGULATIONS PART 1 THE CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 2 THE CALIFORNIA BUILDING CODE, PART 2.5 THE CALIFORNIA RESIDENTIAL CODE, PART 3 THE CALIFORNIA ELECTRICAL CODE, PART 4 THE CALIFORNIA MECHANICAL CODE, PART 5 THE CALIFORNIA PLUMBING CODE, PART 6 THE CALIFORNIA ENERGY CODE, PART 8 THE CALIFORNIA HISTORICAL BUILDING CODE, PART 9 THE CALIFORNIA FIRE CODE, PART 10 THE CALIFORNIA EXISTING BUILDING CODE, PART 11 THE CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE), PART 12 THE CALIFORNIA REFERENCE STANDARDS CODE, WITH CERTAIN MODIFICATIONS AND CHANGES TO SAID CODES TO REFLECT LOCAL CONDITIONS

WHEREAS, adoption of the 2009 International Fire Code, which incorporates the 2010 California Amendments, by the City of Redondo Beach, hereby referred to as the "California Fire Code," is necessary and desirable to provide current regulations for fire prevention; and

WHEREAS, adoption of the 2010 Title 24 California Code of Regulations Part 1 the California Building Standards Administrative Code, Part 2 the California Building Code, Part 2.5 the California Residential Code, Part 3 the California Electrical Code, Part 4 the California Mechanical Code, Part 5 the California Plumbing Code, Part 6 the California Energy Code, Part 8 the California Historical Building Code, Part 9 the California Fire Code, Part 10 the California Existing Building Code, Part 11 the California Green Building Standards Code (CALGreen Code), Part 12 the California Reference Standards Code, by the City of Redondo Beach is necessary and desirable to provide current regulations for the regulation and construction of buildings; and

WHEREAS, it is further desirable to make certain modifications and changes through amendments to said codes to reflect the particular needs and circumstances of the City of Redondo Beach.

NOW, THEREFORE THE CITY COUNCIL OF THE CITY OF REDONDO BEACH HEREBY FINDS AND DETERMINES AS FOLLOWS:

1. Certain modifications and changes to said California Fire Code, 2010 California Building Code, 2010 California Residential Building Code 2010 California Electrical Code, 2010 California Mechanical Code, and 2010 California Plumbing Code 2010 California Green Building Standards Code (CALGreen Code) are reasonable and necessary because of local climatic, geological, or topographical conditions, and to preserve the health, safety, and welfare of the citizens of Redondo Beach as herein after set forth:

2. Many lots in the community are of a depth that require excessive hose lays to reach all portions of a building. Furthermore, changes in elevations around a building reduce access. These conditions necessitate additional standpipes inside a building to quickly apply water;

3. There is often steep terrain in the community, and the lack of access to all sides of a building and high winds can rapidly spread fire;

All of the foregoing conditions necessitate the amendment of subsection 905.4 (5) of Section 905.4 of Chapter 9, Part IX of the California Fire Code imposing additional standpipe requirements and their locations;

4. The regular and consistent wind from the ocean with its corrosive effect on electrical systems requires the amendment of subsection 907.9.5 Part IX of the California Fire Code relating to the maintenance and testing of fire alarm services; and

5. Certain editorial changes to Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code, which contains the amendments to the 2001 California Fire Code previously adopted by the City of Redondo Beach are needed to clarify the 2006 California Fire Code and City's amendments thereto.

NOW, THEREFOREE, THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. AMENDMENT OF CODE. Section 3-4.101, Article 1, Chapter 4, Title 3

1. Throughout all Group E fire areas when greater than 750 square feet in area, or located more than one story above grade plane, or where the combined area of all fire areas on all floors, including any mezzanines, exceed 750 square feet.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

Section 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. Where a Group F fire area exceeds 750 square feet;
2. Where a Group F fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.4.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F occupancy fire areas that contain woodworking operations in excess of 750 square feet in area which generate finely divided combustible waste or use finely divided combustible materials.

Section 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group I-1.

Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 750 square feet;
2. Where a Group M fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy where one of the following conditions exists:

1. A Group S fire area exceeds 750 square feet;
2. A Group S fire area is located more than one story above grade plane; or
3. The combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings with a fire area containing a repair garage exceeding 750 square feet.
2. Buildings with a repair garage servicing vehicles parked in the basement.

Section 903.2.9.2 Bulk storage of tires. Buildings and structures for the storage of tires shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Section 903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

Section 903.2.8 Group R and Group U. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R and/or Group U fire area.

Exceptions:

1. Detached Group R-3 and/or Group U accessory buildings not exceeding 750 square feet.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

Section 903.2.18 Existing buildings of all occupancies. In existing buildings, an automatic sprinkler system shall be required throughout the entire building whenever more than a 750 square feet addition and/or an additional story is added to the existing building.

Section 903.3.1.3 NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems in one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress shall be installed throughout in accordance with NFPA 13D."

SECTION 6. AMENDMENT OF CODE. Section 9-1.00 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.00 Adoption of the California Code of Regulations, Title 24, Part 1, California Administrative Code and Part 8, California Energy Code and Part 8, California Historical Building Code and Part 10, California Existing Building Code and Part 12, California Reference Standards Code.

less than 18 inches (457.5 mm) deep, do not exceed 5,000 gallons (18927 L) and are installed entirely above ground.

10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

11. Swings and other playground equipment accessory to detached one-, and two-family dwellings.

12. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support of Group R-3 and U Occupancies.

13. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1753 mm) in height.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction."

SECTION 9. AMENDMENT OF CODE. Section 9-1.06.1 is hereby added to Chapter 1, Title 9 of the Redondo Beach Municipal Code to read as follows:

"9-1.06.1 Plan submittal.

Section 107.1 of said California Building Code Chapter 1 Division II is hereby amended to read as follows:

Section 107.1 General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data shall be submitted in two or more sets with each permit application. The construction documents for all new commercial buildings and commercial tenant improvement plans shall be prepared by a registered design professional. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional."

SECTION 10. AMENDMENT OF CODE. Section 9-1.03 of Chapter 1, Title 9 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"9-1.03 Fees.

Section 109.1 of said California Building Code Chapter 1 Division II (b, c, d,) is hereby amended to read as follows:

Sec. 109.1 Fees.

(b) Permit Fees. The fee for each permit shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach City Municipal Code.

The determination of value or valuation under any of the provisions of this code shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finished work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment. The determination of value or valuation for residential remodels shall be 65 percent of the new cost of construction.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section 107, of the California Building Code, Chapter 1 Division II a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 109.1, and are in addition to the permit fees.

The Building Official may modify plan review fees and requirements in accordance with Section 109.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

(d) Expiration of Plan Review.

Applications for which no permit is issued within 180 days following the date of

14411 et seq., Business and Professions Code). Mon – Fri, 8:00am-5:00pm

CITY OF REDONDO BEACH
NOTICE OF A PUBLIC HEARING
BEFORE THE CITY COUNCIL TO
ADOPT AN ORDINANCE TO
ADOPT THE 2010 EDITION OF THE CALIFORNIA STATE BUILDING CODES

NOTICE IS HEREBY GIVEN that the City Council of the City of Redondo Beach, California, pursuant to law, will hold a public hearing on December 7, 2010, at 6:00 pm in the Council Chambers of City Hall, 415 Diamond Street, Redondo Beach, California, to **ADOPT TITLE 24, PART'S 1, 2, 2.5, 3, 4, 5, 6, 8, 9, 10, 11, 12 OF THE CALIFORNIA CODE OF REGULATIONS AND AMEND TITLE 9, CHAPTER'S 1, 3, 5, 6, 9, 16 OF THE REDONDO BEACH MUNICIPAL CODE.**

ANY AND ALL PERSONS interested in the above ordinance may appear and be heard thereon.

If you challenge this ordinance in court, you may be limited to raise only those issues that you or someone else raised at the public hearing as described in this notice, or via a written correspondence delivered to the Office of the City Clerk at 415 Diamond Street, Door "C", Redondo Beach, on December 7, 2010 by 5 p.m.

Further information or questions regarding this matter may be directed to Mark Campbell, Building Regulations Manager, by telephone at (310) 318-0636, extension 2614, or via email at Mark.Campbell@redondo.org.

Published as The Beach Reporter No. 7007.
November 18, 2010

AGENDA
REGULAR MEETING
REDONDO BEACH CITY COUNCIL
TUESDAY, DECEMBER 7, 2010
CITY COUNCIL CHAMBERS
415 DIAMOND STREET
6:00 P.M.

CALL MEETING TO ORDER

ROLL CALL

SALUTE TO THE FLAG AND INVOCATION

A. PRESENTATIONS/PROCLAMATIONS/ANNOUNCEMENTS

A1. Mayor's Commendation of the Redondo Beach SBCCOG Volunteers.
A2. Mayor's Presentation of the Key to the City to Sergeant Paul Burch for his 29 years of Service to the City.
A3. Mayor's Commendation to Marcia Slavin for her 21 years of Service to the City.

B. APPROVAL OF ORDER OF AGENDA

C. AGENCY RECESS

C1. REGULAR MEETING OF THE REDEVELOPMENT AGENCY

C2. REGULAR MEETING OF THE PUBLIC FINANCING AUTHORITY

C3. REGULAR MEETING OF THE HOUSING AUTHORITY

D. ADDITIONAL ITEMS FOR IMMEDIATE CONSIDERATION

D1. RED FOLDER ITEMS (To be taken up under L)
Red folder items require immediate action, and came to the attention of the City subsequent to the 72-hour noticing requirement. These items require a 2/3 vote of the City Council (or if less than 2/3 are present, a unanimous vote) to add to the Agenda.

D2. BLUE FOLDER ITEMS
Blue folder items are additional back up material to administrative reports and/or public comments received after the printing and distribution of the agenda packet for receive and file.

E. CONSENT CALENDAR
Business items, except those formally noticed for public hearing, or discussion are assigned to the Consent Calendar. The Mayor or any City Council Member may request that any Consent Calendar item(s) be removed, discussed, and acted upon separately. Items removed from the Consent Calendar will be taken up under the "Excluded Consent Calendar" section below. Those items remaining on the Consent Calendar will be approved in one motion following Oral Communications.

E1. APPROVAL OF AFFIDAVIT OF POSTING for the City Council regular meeting of December 7, 2010.

E2. APPROVAL OF THE FOLLOWING MINUTES:
A. Adjourned Regular and Regular meetings of the City Council, November 2, 2010.
B. Adjourned Regular and Regular meetings of the City Council, November 9, 2010.

E3. APPROVAL OF ACCOUNTS PAYABLE AND PAYROLL
Payroll and Vendor Demands for PP1024, November 6, 2010 – November 19, 2010 Paid November 26,

2010 – Checks 11200-11270, in the amount of $69,313.11. Direct Deposit 74910-75488 in the amount of $1,461,107.03.

Accounts Payable Supplies and Services, Demand Nos. 40121-40365, in the amount of $1,605,755.70 and replacement Demand No.40120.

E4. APPROVAL OF MOTION TO READ BY TITLE ONLY and waive further reading of all Ordinances and Resolutions listed on the agenda.

E5. ADOPT BY TITLE ONLY RESOLUTION NO. CC-1012-398 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, AMENDING THE PARKING VIOLATION CIVIL PENALTIES.

CONTACT: W. JOSEPH LEONARDI, CHIEF OF POLICE

E6. ADOPT BY 4/5THS VOTE AND TITLE ONLY RESOLUTION NO. CC-1012-401 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, MODIFYING THE BUDGET APPROPRIATION FOR FISCAL YEAR 2010-2011 TO APPROPRIATE $22,412.41 IN JUSTICE ASSISTANCE GRANT (JAG) PROGRAM FUNDS.

CONTACT: W. JOSEPH LEONARDI, CHIEF OF POLICE

E7. APPROVE MILLS ACT CONTRACT NO. C-1012-99 WITH CHRISTINA BAXTER TRACY FOR THE PROPERTY LOCATED AT 415 EMERALD STREET, REDONDO BEACH and authorize the Mayor to execute on behalf of the City.

CONTACT: AARON JONES, PLANNING DIRECTOR

E8. APPROVE CONTRACT NO. C-1012-100, A THREE YEAR CONTRACT WITH E.J. WARD INC. FOR ONGOING MAINTENANCE OF THE CITY'S FUEL MANAGEMENT SYSTEM IN AN AMOUNT OF $16,678 PAID FOR BY THE VEHICLE REPLACEMENT FUND and authorize the Mayor to execute on behalf of the City.

CONTACT: MICHAEL WITZANSKY, PUBLIC WORKS DIRECTOR

E9. APPROVE CONTRACT NO. C-1012-101 WITH DAN BOYLE AND ASSOCIATES, INC., FOR PROFESSIONAL CONSULTING SERVICES FOR THE COMPREHENSIVE OPERATIONAL ANALYSIS OF THE BEACH CITIES TRANSIT FIXED ROUTE SYSTEM IN AN AMOUNT OF $30,000 and authorize the Mayor to execute on behalf of the City.

CONTACT: GWENDOLYN PARKER, HARBOR, BUS. AND TRANSIT DIRECTOR

E10. APPROVE CONTRACT NO. C-1012-102 WITH REDONDO BEACH ARTISTS DEBBIE COLLETTE AND PATRICE LINNETT, FOR THE PUBLIC ART DONATION FOR TEN MOSAIC PANELS TO BE INSTALLED ONTO FIVE CONCRETE BOLLARDS AS PART OF THE ESPLANADE IMPROVEMENT PROJECT and authorize the Mayor to execute on behalf of the City.

CONTACT: MAGGIE HEALY, ACTING RECREATION AND COMMUNITY SERVICES DIRECTOR

E11. APPROVE CONTRACT NO. C-1012-103, MEMORANDUM OF UNDERSTANDING WITH CORNERSTONE CONSTRUCTION GROUP, INC. FOR SITE SURVEY AND SOIL REPORT SERVICES IN PREPARATION FOR THE DEMOLITION OF THE VETERANS PARK BAND SHELL AND THE CONSTRUCTION OF A NEW EVENTS PLAZA AMENITY IN AN AMOUNT NOT-TO-EXCEED $10,000 and authorize the Mayor to execute on behalf of the City.

CONTACT: MAGGIE HEALY, ACTING RECREATION AND COMMUNITY SERVICES DIRECTOR

E12. A. APPROVE THE CONCEPTUAL DRAWING FOR REHABILITATION OF THE SEASIDE LAGOON RESTROOMS; AND

B. APPROVE CONTRACT NO. C-1012-104 WITH TERRAZAS AND ASSOCIATES ARCHITECTS TO DEVELOP PLANS AND SPECIFICATIONS FOR THE SEASIDE LAGOON RESTROOM IMPROVEMENT PROJECT IN AN AMOUNT NOT-TO-EXCEED $73,000 and authorize the Mayor to execute on behalf of the City.

CONTACTS: STEVE HUANG, CITY ENGINEER/CHIEF BUILDING OFFICIAL
MAGGIE HEALY, ACTING RECREATION AND COMMUNITY SERVICES DIRECTOR

E13. AUTHORIZE THE PURCHASE OF ONE OCULARIS DS BASE SOFTWARE LICENSE AND FORTY NETDVMS CAMERA LICENSES FROM NORTH AMERICAN VIDEO, INC., THE LOWEST RESPONSIBLE BIDDER, IN AN AMOUNT OF $11,031 USING EDWARD BYRNE MEMORIAL JUSTICE ASSISTANCE GRANT FUNDS.

CONTACT: W. JOSEPH LEONARDI, CHIEF OF POLICE

E14. AUTHORIZE THE SOLE SOURCE PURCHASE OF POWER DMS SUITE COMPLIANCE MANAGEMENT SOFTWARE FROM INNOVATIVE DATA SOLUTIONS, INC. IN AN AMOUNT OF $21,600 USING CALIFORNIA LAW ENFORCEMENT EQUIPMENT PROGRAM GRANT FUNDS.

CONTACT: W. JOSEPH LEONARDI, CHIEF OF POLICE

E15. AUTHORIZE THE MAYOR TO SEND SUPPORT LETTERS ON BEHALF OF THE NATIONAL COUNCIL ON ALCOHOLISM AND DRUG DEPENDENCE OF THE SOUTH BAY (NCADD) AND THE SOUTH BAY CHILDREN'S HEALTH CENTER (SBCHC) TO ENHANCE THEIR APPLICATIONS TO THE LOS ANGELES COUNTY, SUBSTANCE ABUSE PREVENTION AND CONTROL GRANT PROGRAM.

CONTACT: MAGGIE HEALY, ACTING RECREATION AND COMMUNITY SERVICES DIRECTOR

E16. ADOPT BY TITLE ONLY RESOLUTION NO. CC-1012-402 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, RECITING THE FACT OF THE SPECIAL MUNICIPAL ELECTION CONSOLIDATED WITH THE COUNTY OF LOS ANGELES HELD ON TUESDAY, NOVEMBER 2, 2010, DECLARING THE RESULT AND SUCH OTHER MATTERS AS PROVIDED BY LAW.

CONTACT: ELEANOR MANZANO, CITY CLERK

E17. EXCUSE ABSENCES OF VARIOUS COMMISSIONERS' FROM A VARIETY OF MEETINGS.

CONTACT: ELEANOR MANZANO, CITY CLERK

E18. A. ADOPT BY TITLE ONLY RESOLUTION NO. CC-1012-403 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, DECLARING ITS INTENT TO VACATE SURPLUS PORTIONS OF THE PUBLIC RIGHT-OF-WAY OF DIAMOND STREET AND FLAGLER LANE, REFERRING TO A MAP FOR PARTICULARS AND SETTING THE TIME AND PLACE FOR A PUBLIC HEARING.

B. SET JANUARY 18, 2011 AT 6:30 P.M., IN REDONDO BEACH CITY HALL COUNCIL CHAMBERS, AS THE TIME AND PLACE FOR A PUBLIC HEARING TO DISCUSS THE CITY'S INTENT TO VACATE SAID RIGHT-OF-WAY.

CONTACT: STEVE HUANG, CITY ENGINEER/CHIEF BUILDING OFFICIAL

F. ORAL COMMUNICATIONS

Anyone wishing to address the City Council on any Consent Calendar item on the agenda, which has not been pulled by Council for discussion may do so at this time. Each speaker will be permitted to speak only once and

comments will be limited to a total of three minutes.

G. EXCLUDED CONSENT CALENDAR ITEMS

H. PUBLIC PARTICIPATION ON NON-AGENDA ITEMS

This section is intended to provide members of the public with the opportunity to comment on any subject that does not appear on this agenda for action. This section is limited to 30 minutes. Each speaker will be afforded three minutes to address the Mayor and Council. Each speaker will be permitted to speak only once. Written requests, if any, will be considered first under this section.

I. EX PARTE COMMUNICATIONS

This section is intended to allow all elected officials the opportunity to reveal any disclosure or ex parte communication about the following public hearings.

J. PUBLIC HEARINGS

J1. PUBLIC HEARING TO PROPOSE A LEVY OF AN ASSESSMENT UPON THE BUSINESSES WITHIN THE RIVIERA VILLAGE BUSINESS IMPROVEMENT DISTRICT.

ADOPT BY TITLE ONLY RESOLUTION NO. CC-1012-400 - A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, CONFIRMING THE REPORT OF THE RIVIERA VILLAGE BUSINESS IMPROVEMENT DISTRICT ADVISORY BOARD AND LEVYING AN ASSESSMENT FOR FISCAL YEAR 2011.

Staff recommends that City Council:

a. Open the Public Hearing and take testimony; and
b. Close the Public Hearing; and
c. Adopt by title only Resolution No. CC-1012-400.

CONTACT: GWENDOLYN PARKER, HARBOR, BUS. AND TRANSIT DIRECTOR

J2. PUBLIC HEARING TO CONSIDER RENEWAL OF A LEVEL 1 ENTERTAINMENT PERMIT ALLOWING LIVE ENTERTAINMENT AT "BAC STREET LOUNGE" LOCATED AT 2422 ARTESIA BOULEVARD, REDONDO BEACH.

Staff recommends that City Council:

a. Open the public hearing and take public testimony;
b. Close the public hearing and review the conditions of approval for the Level I Entertainment Permit for BAC Street Lounge;
c. Determine if any further permit modifications are warranted and if necessary, make any permit modifications;
d. Grant the renewal of the permit with no expanded hours.

CONTACT: AARON JONES, PLANNING DIRECTOR

J3. PUBLIC HEARING TO CONSIDER RENEWAL OF A LEVEL 1 ENTERTAINMENT PERMIT ALLOWING LIVE ENTERTAINMENT AT "THIRSTY CLUB" LOCATED AT 2705 1/2 ARTESIA BOULEVARD, REDONDO BEACH.

Staff recommends that City Council:

a. Open the public hearing and take public testimony;
b. Close the public hearing and review the conditions of approval for the Level I Entertainment Permit for Thirsty Club;
c. Determine if any permit modifications are warranted and if necessary make any permit modifications;
d. Grant the renewal of the permit with no modification of the live band restrictions and no expanded hours.

CONTACT: AARON JONES, PLANNING DIRECTOR

J4. PUBLIC HEARING TO CONSIDER RENEWAL OF A LEVEL 2 ENTERTAINMENT PERMIT ALLOWING LIVE ENTERTAINMENT AT "DOLPHIN BAR" LOCATED AT 1995 ARTESIA BOULEVARD, REDONDO BEACH.

Staff recommends that City Council:
a. Open the public hearing and take public testimony;
b. Close the public hearing and review the conditions of approval for the Level II Entertainment Permit for Dolphin Bar;
c. Determine if any permit modifications are warranted and if necessary make any permit modifications;
d. Grant the renewal of the permit subject to the recommended conditions.

CONTACT: AARON JONES, PLANNING DIRECTOR

J5. PUBLIC HEARING TO CONSIDER ADOPTION OF THE PROPOSED 2010 CALIFORNIA FIRE CODE, THE 2010 TITLE 24 CALIFORNIA CODE OF REGULATIONS, AND MODIFICATIONS TO THE CITY OF REDONDO BEACH MUNICIPAL CODE.

ADOPT BY TITLE ONLY ORDINANCE NO. 3064-10 - AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, AMENDING CERTAIN PROVISIONS OF CHAPTER 4, TITLE 3 AND TITLE 9 OF THE REDONDO BEACH MUNICIPAL CODE, AND ADOPTING THE 2009 INTERNATIONAL FIRE CODE, WHICH INCORPORATES THE 2010 CALIFORNIA AMENDMENTS, THE 2010 TITLE 24 CALIFORNIA CODE OF REGULATIONS PART 1 THE CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 2 THE CALIFORNIA BUILDING CODE, PART 2.5 THE CALIFORNIA RESIDENTIAL CODE, PART 3 THE CALIFORNIA ELECTRICAL CODE, PART 4 THE CALIFORNIA MECHANICAL CODE, PART 5 THE CALIFORNIA PLUMBING CODE, PART 6 THE CALIFORNIA ENERGY CODE, PART 8 THE CALIFORNIA HISTORICAL BUILDING CODE, PART 9 THE CALIFORNIA FIRE CODE, PART 10 THE CALIFORNIA EXISTING BUILDING CODE, PART 11 THE CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE), PART 12 THE CALIFORNIA REFERENCE STANDARDS CODE, WITH CERTAIN MODIFICATIONS AND CHANGES TO SAID CODES TO REFLECT LOCAL CONDITIONS. For second reading and adoption.

Staff recommends that City Council:
a. Open the Public Hearing and take testimony; and
b. Close the Public Hearing; and
c. Adopt by title only Ordinance No. 3064-10.

CONTACTS: DANIEL MADRIGAL, FIRE CHIEF
STEVE HUANG, CITY ENGINEER/CHIEF BUILDING OFFICIAL

K. ITEMS CONTINUED FROM PREVIOUS AGENDAS

L. ITEMS FOR DISCUSSION PRIOR TO ACTION (OR RED FOLDER ITEMS)
This section will include red folder agenda items.

L1. DISCUSSION REGARDING URGENCY ORDINANCE IMPOSING A MORATORIUM ON NEW MASSAGE/BODYWORK AND ACUPUNCTURE BUSINESSES AND PRACTITIONERS.

ADOPT BY 4/5THS VOTE AND TITLE ONLY ORDINANCE NO. 3065-10 - AN URGENCY ORDINANCE OF THE CITY COUNCIL OF THE CITY OF REDONDO BEACH, CALIFORNIA, IMPOSING A MORATORIUM ON THE ISSUANCE OF ANY NEW PERMIT, LICENSE, APPROVAL OR ENTITLEMENT PERTAINING TO NEW MASSAGE/BODYWORK AND ACUPUNCTURE BUSINESSES, SERVICES AND PRACTITIONERS.

Staff recommends that City Council:

a. Adopt the Exemption Declaration; and
b. Adopt by 4/5ths vote and title only Urgency Ordinance No. 3065-10.

CONTACT: W. JOSEPH LEONARDI, CHIEF OF POLICE

M. CITY MANAGER ITEMS

N. MAYOR AND COUNCIL ITEMS

O. MAYOR AND COUNCIL REFERRALS TO STAFF

P. RECESS TO CLOSED SESSION

P1. CONFERENCE WITH LEGAL COUNSEL AND LABOR NEGOTIATOR - The Closed Session is authorized by the attorney-client privilege, Government Code Sec. 54957.6.

AGENCY NEGOTIATOR: William P. Workman, City Manager
EMPLOYEE ORGANIZATIONS: Redondo Beach Police Officers Association (Management Unit); Redondo Beach Police Officers Association (Officers & Sergeants); Redondo Beach City Employees Association; Professional and Supervisory Association; Teamsters; and, Redondo Beach Firefighters Association

P2. CONFERENCE WITH REAL PROPERTY NEGOTIATOR - The Closed Session is authorized by the Government Code Section 54956.8:

AGENCY NEGOTIATOR: Gwendolyn Parker, Harbor, Business & Transit Director
PROPERTY: Portion of Harbor Parcel Q (portion of APN: 7503-003-900)
NEGOTIATING PARTY: Al Ching, Lanakila Outrigger Canoe Club
Lori Litahata, Nahoa Outrigger Canoe Club
UNDER NEGOTIATION: Price and Terms of Payment

P3. CONFERENCE WITH REAL PROPERTY NEGOTIATOR – The Closed Session is authorized by the attorney-client privilege, Government Code Section 54956.8:

AGENCY NEGOTIATOR: Maggie Healy, Acting Rec. & Community Services Director
PROPERTY: 1922 Artesia Blvd.
NEGOTIATING PARTY: John Chuka.
UNDER NEGOTIATION: Both Price and Terms of Payment

P4. CONFERENCE WITH REAL PROPERTY NEGOTIATOR - The Closed Session is authorized by the Government Code Section 54956.8:

AGENCY NEGOTIATOR: Bill Workman, City Manager
Gwendolyn Parker, Harbor, Business & Transit Director
PROPERTY: 200 Block of Fisherman's Wharf;
135-9 International Boardwalk;
Pad 2 (400 Block Fisherman's Wharf);
APN 7505-002-932 (Parcel 10);
500 Fisherman's Wharf;
and APNs 7503-008-901 and 7503-008-902 (Triton Oil)
NEGOTIATING PARTY: Scott Shafer
UNDER NEGOTIATION: Both Price and Terms of Payment

Q. RECONVENE TO OPEN SESSION

ADJOURNMENT

In memory of:

Mariana Weavers, Public Safety Commissioner from year 2002 to year 2004.

The next meeting of the City Council of the City of Redondo Beach will be an adjourned regular meeting to be held at 5:00 p.m. (Closed Session) and a regular meeting to be held at 6:00 p.m. on Tuesday, December 14, 2010 in the Redondo Beach City Hall Council Chambers, 415 Diamond Street, Redondo Beach, California.

It is the intention of the City of Redondo Beach to comply with the Americans with Disabilities Act (ADA) in all respects. If, as an attendee or a participant at this meeting you will need special assistance beyond what is normally provided, the City will attempt to accommodate you in every reasonable manner. Please contact the City Clerk's Office at (310) 318-0656 at least forty-eight (48) hours prior to the meeting to inform us of your particular needs and to determine if accommodation is feasible. Please advise us at that time if you will need accommodations to attend or participate in meetings on a regular basis.An Agenda Packet is available 24 hours a day at the Redondo Beach Police Department and at www.redondo.org under the City Clerk. Agenda packets are available during Library hours, at the Reference Desks at the Redondo Beach Main Library and Redondo Beach North Branch Library. During City Hall hours, Agenda Packets are also available for review in the Office of the City Clerk.

Any writings or documents provided to a majority of the City Council regarding any item on this agenda will be made available for public inspection at the City Clerk's Counter at City Hall located at 415 Diamond Street, Door C, Redondo Beach, CA during normal business hours. In addition, such writings and documents will be posted on the City's website at www.redondo.org.

Chapter 4

FIRE PREVENTION

Sections:

Article 1. Fire Prevention Code*

* Sections 3-4.101 through 3-4.103, codified from Ordinance No. 1507, and Section 3-4.104, as added by Ordinance No. 1924 c.s., effective January 26, 1967, amended in their entirety by Ordinance No. 1947 c.s., effective November 29, 1967. Sections 3-4.109 through 3-4.118, as added by said Ordinance No. 1947 c.s., repealed by Ordinance No. 2075 c.s., effective September 20, 1972.

3-4.101 California Fire Code adopted.

The California Fire Code 2007 Edition, and appendices, Appendix Chapter 1, Appendices A, B, C, D, E, F, G as compiled and published by the International Code Council, one copy of which is on file in the office of the City Clerk, are hereby adopted as the fire code for the City proscribing regulations governing conditions hazardous to life and property from fire or explosion and are hereby referred to and by this reference expressly incorporated in this article and made a part of this article as though set forth in this article at length. Subject to the additions, deletions, and amendments set forth in this article, said California Fire Code and aforementioned appendices are hereby established and adopted, and the same shall be known, designated, and referred to as the "Fire Code" for the City. (§ 1, Ord. 1947 c.s., eff. November 29, 1967, as amended by § 1, Ord. 2075 c.s., eff. September 20, 1972, § 1, Ord. 2306 c.s., eff. May 27, 1981, § 1, Ord. 2406 c.s., eff. November 28, 1984, § 1, Ord. 2493 c.s., eff. March 31, 1988, § 1, Ord. 2599 c.s., eff. September 20, 1990, § 1, Ord. 2664 c.s., eff. July 9, 1992, § 1, Ord. 2754 c.s., eff. December 21, 1995, § 1, Ord. 2835 c.s., eff. July 15, 1999, § 1, Ord. 2894 c.s., eff. October 31, 2002, and § 1 Ord. 3009 c.s., eff. December 6, 2007)

3-4.102 Definitions: Uniform Building Code.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as amended by §§ 2 and 3, Ord. 2075 c.s., eff. September 20, 1972, § 2, Ord. 2306 c.s., eff. May 27, 1981, § 2, Ord. 2406 c.s., eff. November 28, 1984, § 1, Ord. 2493 c.s., eff. March 31, 1988, § 2, Ord. 2599 c.s., eff. September 20, 1990, and § 2, Ord. 2664 c.s., eff. July 9, 1992; repealed by § 2, Ord. 2754 c.s., eff. December 21, 1995)

3-4.103 Security doors and gates.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as amended by §§ 2 and 3, Ord. 2075 c.s., eff. September 20, 1972, and § 3, Ord. 2306 c.s., eff. May 27, 1981; repealed by § 3, Ord. 2406 c.s., eff. November 28, 1984)

3-4.104 Automobile tire rebuilding plants.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as renumbered by § 2, Ord. 2075 c.s., eff. September 20, 1972, as amended by § 5, said Ord. 2075 c.s., and § 4, Ord. 2306 c.s., eff. May 27, 1981; repealed by § 3, Ord. 2599 c.s., eff. September 20, 1990)

3-4.105 Fireworks.

The use and discharge of fireworks as defined in the California Fire Code is hereby prohibited in the City of Redondo Beach. Chapter 33 of said California Fire Code is hereby amended to read as follows:

> Chapter 33—Exception. Nothing contained in this chapter shall be construed to prohibit the use of fireworks by railroads or other transportation agencies or the Police or Fire Departments when such fireworks are used for signal purposes, for illumination, or for the training of employees by such agencies. Neither shall

the provisions of this article prohibit the use and sale of blank cartridges to be used for an exhibit, show, play, theater, signal for ceremonial purposes, signal in athletic or sports events, or by acknowledged military organizations.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as amended by § 1, Ord. 2015 c.s., eff. March 4, 1970, as renumbered by § 2, Ord. 2075 c.s., eff. September 20, 1972, as amended by § 6, said Ord. 2075 c.s., § 1, Ord. 2109 c.s., eff. November 14, 1973, §§ 1, 2, 3, and 4, Ord. 2282 c.s., eff. November 8, 1979, § 2, Ord. 2297 c.s., eff. June 9, 1980, Initiative Ord. 2292 c.s., adopted at a Special Municipal Election held November 4, 1980, § 5, Ord. 2306 c.s., eff. May 27, 1981, § 3, Ord. 2664 c.s., eff. July 9, 1992, § 3, Ord. 2754 c.s., eff. December 21, 1995, § 2, Ord. 2835 c.s., eff. July 15, 1999, and § 2, Ord. 3009 c.s., eff. December 6, 2007)

3-4.106 Exemptions.

In accordance with Chapter 33 of the Fire Code, fireworks and the possession, manufacture storage, handling and use are prohibited. Supervised public displays of fireworks may be exempted from the prohibition of Section 3-4.105 of this article by permission of the City Council on the basis that such permission is granted after a review and report from the Fire Chief that such display will be performed by a licensed operator in a manner which is not hazardous to people or property. (Initiative Ord. 2293 c.s., adopted at a Special Municipal Election held November 4, 1980, § 2, Ord. 2894 c.s., eff. October 31, 2002, and § 3, Ord. 3009 c.s., eff. December 6, 2007)

3-4.107 Fire alarm systems.

Subchapter 907.20.5 of Chapter 9 of Part IX of the California Fire Code as adopted by this article is hereby amended to add subsection 907.20.5(a) as follows:

Sec. 907.20(a)—Annual Fire Alarm Maintenance, Inspection and Testing. Fire alarm systems must be certified by a fire alarm testing agency holding a C-10 (electrical) and C-61 (low voltage) state contractor's licenses in accordance with NFPA-72. Every owner of a fire alarm system subject to this subsection must provide the City Fire Department with certification issued by said licensed fire alarm testing agency verifying that all components of the fire alarm systems are operative and have been tested according to National Fire Protection Association standards. Fire alarm systems shall be serviced whenever:

1. A false alarm occurs for an unknown reason or reasons;
2. The fire alarm is activated by fire;
3. The system is in "trouble" condition.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as amended by § 7, Ord. 2075 c.s., eff. September 20, 1972, as renumbered by Initiative Ord. 2293 c.s., adopted at a Special Municipal Election held November 4, 1980, as amended by §§ 6 and 7, Ord. 2306 c.s., eff. May 27, 1981, § 4, Ord. 2406 c.s., eff. November 28, 1984, § 2, Ord. 2493 c.s., eff. March 31, 1988, § 4, Ord. 2599 c.s., eff. September 20, 1990, § 4, Ord. 2664 c.s., eff. July 9, 1992, § 4, Ord. 2754 c.s., eff. December 21, 1995, § 3, Ord. 2835 c.s., eff. July 15, 1999, § 3, Ord. 2894 c.s., eff. October 31, 2002,and § 4, Ord. 3009 c.s., eff. December 6, 2007)

3-4.107.1 NFPA 13D Alarm notification.

Amend Chapter 9 of the California Fire Code to read as follows:

Section 907.2.10.1.6, R-2, R-3, R3.1, R-4 and I-1 occupancy alarm notification with NFPA 13D protection systems:

a. The fire sprinkler system shall be equipped with a weatherproof horn/strobe located at the front of the structure and/or as near as possible to the front, viewable from the addressed street. It power shall be connected on a kitchen refrigerator circuit or a dedicated tamper proof circuit breaker of sufficient amperage capacity.
b. If this circuit is not accessible from outside the structure, an additional tamper and weather proof disconnect switch shall be provided and located near the fire sprinkler riser.
c. Automatic fire sprinkler system flow alarm shall be required in-house meeting the same requirement of notification. No inside notification appliances required when flow alarm is interconnected to a multiple station smoke detection systems.

(§ 5, Ord. 3009 c.s., eff. December 6, 2007)

3-4.108 Flammable and combustible liquids.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as renumbered by § 2, Ord. 2075 c.s., eff. September 20, 1972, as amended by § 8, said Ord. 2075 c.s., as renumbered by Initiative Ord. 2293 c.s., adopted at a Special Municipal Election held November 4, 1980; repealed by § 7, Ord. 2306 c.s., eff. May 27, 1981)

3-4.109 General precautions against fire.

(§ 1, Ord. 1947 c.s., eff. November 29, 1967, as amended by § 9, Ord. 2075 c.s., eff. September 20, 1972, as renumbered by Initiative Ord. 2293 c.s., adopted at a Special Municipal Election held November 4, 1980; repealed by § 7, Ord. 2306 c.s., eff. May 27, 1981)

3-4.110 Fire standpipes system.

Section 905.4, Chapter 9 of the California Fire Code adopted by this article is hereby amended to add subsection 905.4 (7) as follows:

906.4 (7)—Other locations. When all portions of a building cannot be reached by means of a normal route of travel with 150 feet of fire hose extended from a fire apparatus parked on a public way or fire access road, or with 100 feet of hose extended from a standpipe as required by this section, additional standpipe connections shall be installed as needed to provide such access.

(§ 5, Ord. 2599 c.s., eff. September 20, 1990, as amended by § 5, Ord. 2664 c.s., eff. July 9, 1992, § 5, Ord. 2754 c.s., eff. December 21, 1995, § 4, Ord. 2835 c.s., eff. July 15, 1999, § 3, Ord. 2894 c.s., eff. October 31, 2002, and § 6, Ord. 3009 c.s., eff. December 6, 2007)

3-4.111 Fire extinguishing systems.

Section 903 of Chapter 9 of the California Fire Code is hereby amended as follows:

Section 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies.

Section 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies.

Section 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies.

Section 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies.

Section 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 750 square feet.

Section 903.2.1A Group B. An automatic sprinkler system shall be provided throughout buildings containing a Group B occupancy where one of the following conditions exists:

1. Where a Group B fire area exceeds 750 square feet;
2. Where a Group B fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.2 Group E. Except as provided for in Sections 903.2.2.1 for a new public school campus and 907.2.3.6.1 (fire alarm and detection) for modernization of an existing public school campus building(s), an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas when greater than 750 square feet in area, or located more than one story above grade plane, or where the combined area of all fire areas on all floors, including any mezzanines, exceed 750 square feet.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

Section 903.2.3 Group F. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. Where a Group F fire area exceeds 750 square feet;
2. Where a Group F fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.3.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 750 square feet in area which generate finely divided combustible waste or use finely divided combustible materials.

Section 903.2.5 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group I-1.

Section 903.2.6 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 750 square feet;
2. Where a Group M fire area is located more than one story above grade plane; or

3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.8 Group S. An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy where one of the following conditions exists:

1. A Group S fire area exceeds 750 square feet;
2. A Group S fire area is located more than one story above grade plane; or
3. The combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.8.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings with a fire area containing a repair garage exceeding 750 square feet;
2. Buildings with a repair garage servicing vehicles parked in the basement.

Section 903.2.8.2 Bulk storage of tires. Buildings and structures for the storage of tires shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Section 903.2.9 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

Section 903.2.7 Group R and Group U. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R and/or Group U fire area.

Exceptions:

1. Detached Group R-3 and/or Group U accessory buildings not exceeding 750 square feet.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

Section 903.2.18 Existing buildings of all occupancies. In existing buildings, an automatic sprinkler system shall be required throughout the entire building whenever more than a 750 square feet addition and/or an additional story is added to the existing building.

Section 903.3.1.3 NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems in one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three (3) stories above grade plane in height with a separate means of egress shall be installed throughout in accordance with NFPA 13D.

(§ 7, Ord. 3009 c.s., eff. December 6, 2007)

Article 1.1. False Alarms: Response Costs*

* Section 3-4.1.1.101, as added by Ordinance No. 2652 c.s., effective April 2, 1992, renumbered to Sections 3-4.1.01 through 3-4.1.05 by codifier to conform with the numbering system of the Code.

3-4.1.01 Definitions.

For the purposes of this article, certain words and phrases are defined as follows:

"Alarm signal" shall mean "alarm signal" as defined in the Uniform Fire Code, 1988 Edition, Section 14.102, or as that Code section may be amended.

"Alarm system" shall mean "alarm system" as defined in the Uniform Fire Code, 1988 Edition, Section 14.102, or as that Code section may be amended.

"False alarm" shall mean the intentional or negligent reporting, giving, signaling or transmission, whether by telephone, spoken word, alarm system, alarm signal or otherwise, information to the effect that there is a fire or emergency at or near the place indicated by the person giving, signaling or transmitting such information, or by the operation of an alarm system or alarm signal that there is a fire or emergency for which no fire or emergency actually exists. (§ 1, Ord. 2652 c.s., eff. April 2, 1992)

3-4.1.02 False alarm response costs.

There shall be imposed a response fee upon the owner or occupant of any building or structure upon which is located an alarm system which causes false fire alarms above the permissible number of false fire alarms as set and fixed by resolution, and for which there was a response by an agency of the City. The fee for such response costs shall be set and fixed by resolution, and shall be the amount of the actual cost of response. (§ 1, Ord. 2652 c.s., eff. April 2, 1992, as amended by § 1, Ord. 2672 c.s., eff. October 22, 1992)

3-4.1.03 Reporting of installation or maintenance of fire alarm or fire signal: Fee imposed.

(a) Any person installing, or performing maintenance upon, any alarm system, or any component part of the fire alarm system, shall report the time, date and location of such installation or maintenance.

(b) There shall be imposed a response fee upon the owner, occupant, installer or repair person for any false alarm occasioned during such installation or maintenance for which no notice has been provided pursuant to this section to the Redondo Beach Fire Department. The fee for such response costs shall be set and fixed by resolution, and shall be the amount of the actual cost of response. (§ 1, Ord. 2652 c.s., eff. April 2, 1992)

3-4.1.04 Exceptions.

No response fee shall be imposed for any false alarm resulting from:

(a) Acts of God or nature; and

(b) Interruptions of electrical service.

(§ 1, Ord. 2652 c.s., eff. April 2, 1992)

3-4.1.05 Uniform Fire Code.

It is not the intention of this section to supersede the Uniform Fire Code. (§ 1, Ord. 2652 c.s., eff. April 2, 1992)

Article 2. Flammable Liquids*

* (Sections 3-4.201 and 3-4.202, codified from Ordinance No. 1343 c.s., repealed by Ordinance No. 1947 c.s., effective November 29, 1967)

Article 3. Fireworks*

* (Sections 3-4.301 and 3-4.302, codified from Ordinance No. 978 c.s., as amended by Ordinance No. 1900 c.s., effective March 23, 1966, Section .3-4.303, as added by said Ordinance No. 1900 c.s., as amended by Ordinance No. 1901 c.s., effective March 30, 1966, and Sections 3-4.304 through 3-4,313, as added by said Ordinance No. 1900 c.s., repealed by Ordinance No. 1947 c.s., effective November 29, 1967)

Article 4. Fire Zones*

* Sections 3-4.401 through 3-4,403, codified from Ordinance No. 1720 c.s., as amended by Ordinance Nos. 1871 c.s., effective March 25, 1965, and 2005 c.s., effective October 8, 1969, repealed by Ordinance No. 2306 c.s., effective May 27, 1981.

3-4.401 King Harbor Recreational Area.

(a) Definitions. For the purposes of this section, "King Harbor Recreational Area" shall mean that area described in Section 10-2.2512 of Article 13 of Chapter 2 of Title 10 of this Code.

(b) Safety and fire prevention regulations. The following safety and fire prevention regulations relating to property in the King Harbor Recreational Area are hereby adopted:

(1) Minimum requirements. The minimum requirements relative to building construction shall be that no building or structure as a minimum shall be less than one-hour fire protection throughout.

(2) Roof coverings. Where it is desirous to use, for aesthetic reasons, wood shingles or shakes, they shall be deemed acceptable when installed in the following manner:

(i) Shakes, shingles, and the like. Shakes, shingles, and the like shall be of the best grade as approved by the Building Officer.

(ii) Open construction. For buildings of the type not enclosed by sidewalls, the roof decks to which shingles or shakes are to be applied shall be solidly sheathed. The sheathing shall be well seasoned and dry. The sheathing boards shall be at least one inch nominal thickness, and tongue and groove boards shall not be over six (6″) inches wide. Plywood sheathing may be accepted provided it is a minimum five-eighths (5/8″) inch in thickness. Roll roofing of not less than fifteen (15) pounds asphalt felt securely fastened shall be placed over roof decks and below shingles or shakes.

(iii) Enclosed construction. Roof decks to which shingles or shakes are to be applied shall be solidly sheathed. The sheathing shall be well seasoned and dry. The sheathing boards shall be one inch nominal thickness and not over six (6″) inches wide. Plywood sheathing may be accepted provided it is a minimum five-eighths (5/8″) inch in thickness. Sheetrock (dry wall) of not less than five-eighths (5/8″) inch shall be placed over the roof deck and below the shingles or shakes.

(iv) Fire retardant. All shingles or shakes shall be treated with an approved fire retardant material, subject to approval and inspection by the Fire Department.

(3) Separation of buildings. A separation of twenty (20′) feet shall be provided between buildings where the use of wood shingles or shakes as described are approved.

The Fire Chief may require that specific or additional fire protection be provided if, in his opinion, the area separation would create a greater danger by fire.

(4) Decorative materials. Where less than one-hour fire protection can be feasibly obtained, due to interior or exterior architecture or by the installation of decorative material, automatic sprinklers shall be installed upon the approval of the Fire Chief and Building Officer.

(5) Occupancy and use. Every building shall be judged on its own merits, and where the occupancy and use of any building or structure indicates construction requirements greater than the minimum standards required by this section, the type and standards of construction shall meet those specified by the Fire Chief and the Building Officer. (§ 1, Ord. 1720 c.s., as amended by § 1, Ord. 2005

c.s., eff. October 8, 1969, as renumbered and amended by §§ 9 and 10, Ord. 2306 c.s., eff. May 27, 1981, and § 1(17), Ord. 2844 c.s., eff. November 4, 1999)

Article 5. Heliport and Helistop Landing Facilities*

* (Section 3-4.501, as added by Ordinance No. 1759 c.s., effective March 19, 1962, repealed by Ordinance No. 2306 c.s., effective May 27, 1981)

Chapter 1

BUILDING CODE*

Sections:

* Sections 9-1.07 through 9-1.11, as added by Ordinance Nos. 1749 c.s., effective December 20, 1961, 1833 c.s., effective May 27, 1984, 1886 c.s., effective August 11, 1965, 1897 c.s., effective December 1, 1965, and 2034 c.s., effective January 13, 1971, as renumbered by Ordinance Nos. 1971 c.s., effective July 17, 1968, and 2050 c.s., effective July 28, 1971, repealed by Ordinance No. 2076 c.s., effective September 20, 1972.

9-1.00 Adoption of California Codes.

Those certain documents, one copy of which is on file in the office of the City Clerk, being marked and designated as the California Code of Regulations, Title 24, Part 1, 2007 California Administrative Code and Part 6, 2008 California Energy Code and Part 7, 2007 California Elevator Safety Construction Code and Part 8, 2007 California Historical Building Code and Part 10, 2007 California Existing Building Code and Part 11, 2008 California Green Building Standards and Part 12, 2007 California Reference Standards Code, be and the same are hereby adopted as the Code of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and/or structures in the City; providing for the issuance of permits and all collection of fees therefor; and providing penalties for violations of such Code; and each and all of the regulations, provisions, penalties, conditions, and terms of such California Code of Regulations, Title 24, Part 1, 2007 California Administrative Code and Part 6, 2008 California Energy Code and Part 7, 2007 California Elevator Safety Construction Code and Part 8, 2007 California Historical Building Code and Part 10, 2007 California Existing Building Code and Part 11, 2008 California Green Building Standards and Part 12, 2007 California Reference Standards Code are hereby referred to, adopted, and made a part of this chapter as if fully set forth in this chapter, subject to the additions, deletions, and amendments set forth in this chapter. (§ 8, Ord. 3009 c.s., eff. December 6, 2007, as amended by § 1, Ord. 3027 c.s., eff. December 18, 2008, and § 1, Ord. 3039-09 c.s., eff. August 22, 2009)

9-1.01 Adoption of California Building Code, Part 2, Volumes 1 and 2.

Those certain documents, one copy of which is on file in the office of the City Clerk, being marked and designated as the 2007 California Building Code, Part 2, Volume 1 and 2 (and Chapter 33, and Appendix Chapter 1, D, F, H, I, J), be and the same are hereby adopted as the Code of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all buildings and/or structures in the City; providing for the issuance of permits and all collection of fees therefore; and providing penalties for violations of such Code; and each and all of the regulations, provisions, penalties, conditions, and terms of such " 2007 California Building Code Volumes I and II" (and Chapter 33 and Appendix Chapter 1, D, F, H, I, J) are hereby referred to, adopted, and made a part of this chapter as if fully set forth in this chapter, subject to the additions, deletions and amendments set forth in this chapter. (§ 1, Ord. 1749 c.s., eff. December 20, 1961, as amended by § 1, Ord. 1886 c.s., eff. August 11, 1965, § 1, Ord. 1971 c.s., eff. July 7, 1968, § 1, Ord. 2076 c.s., eff. September 20, 1972, § 1, Ord. 2231 c.s., eff. May 10, 1978, § 1, Ord. 2308 c.s., eff. May 27, 1981, § 1, Ord. 2404 c.s., eff. No-

vember 14, 1984, § 1, Ord. 2476 c.s., eff. October 15, 1987, § 1, Ord. 2565 c.s., eff. January 1, 1990, § 1, Ord. 2663 c.s., eff. July 9, 1992, § 1, Ord. 2753 c.s., eff. January 1, 1996, § 3, Ord. 2787 c.s., eff. January 16, 1997, § 1, Ord. 2834 c.s., eff. July 1, 1999, § 1, Ord. 2893 c.s., eff. October 31, 2002, and § 9, Ord. 3009 c.s., eff. December 6, 2007)

9-1.02 Permit required.

Section 105.1 of the California Building Code, Appendix Chapter 1 is hereby amended as follows:

105.1 Permits Required. Except as specified in Section 105.2 of this Section, no building or structure regulated by this Code shall be erected, constructed, enlarged, altered, repaired, moved, improved, removed, converted or demolished unless a separate permit for each building or structure has first been obtained from the building official.

For work with a valuation listed at Fifty Thousand and no/100ths ($50,000.00) Dollars or more the permit must be obtained by a contractor licensed in the state of California or for single family dwellings less than two units the permit may be obtained by the owner using licensed sub-contractors.

An engineering permit is required prior to commencement of sandblasting work. Additionally, applicant must post a refundable cash deposit of Two Hundred and no/100ths ($200.00) Dollars for each single-family dwelling. Contractor is required to comply with all the requirements of the National Pollutant Discharge Elimination System (NPDES). The sandblasting must be wet sandblasting, and all the precautionary measures must be taken by the contractor to protect life and property of neighbors, residents and the public. Adjacent property owners must be notified at least two (2) days prior to sandblasting.

Section 105.2 of the California Building Code, Appendix Chapter 1 is hereby amended as follows:

105.2 Work Exempt from Permit. Permits shall not be required for the following:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11m^2).
2. Wood fences not exceeding six (6) feet (1,829 mm) in height including concrete or masonry pilasters unless fence is built on slope and retains earth, and masonry and concrete fences that are not over five (5) feet (1,524 mm) in height unless built on a slope or retaining earth.
3. Oil derricks.
4. Retaining walls which are not over four (4) feet (1,219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II, or III-A liquids.
5. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18,927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
6. Platforms, decks, walks and driveways not more than thirty (30″) inches (762 mm) above grade and not over any basement or story below.
7. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.
8. Temporary motion picture, television and theater stage sets and scenery.
9. Prefabricated swimming pools accessory to a Group R-3, Occupancy that are less than eighteen (18″) inches (457.5 mm) deep, do not exceed 5,000 gallons (18,927 L) and are installed entirely above ground.
10. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
11. Swings and other playground equipment accessory to detached one- and two-family dwellings.
12. Window awnings supported by an exterior wall that do not project more than fifty-four (54″) inches (1,372 mm) from the exterior wall and do not require additional support of Group R-3 and U Occupancies.
13. Non-fixed and movable fixtures, cases, racks, counters and partitions not over five (5′) feet nine (9″) inches (1,753 mm) in height.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

(§ 2, Ord. 1749 c.s., eff. December 20, 1961, as amended by § 1, Ord. 1886 c.s., eff. August 11, 1965; repealed by § 2, Ord. 2663 c.s., eff. July 9, 1992, reconstituted added by § 2, Ord. 2753 c.s., eff. January 1, 1996, amended by

§ 2, Ord. 2834 c.s., eff. July 1, 1999, § 1, Ord. 2857 c.s., eff. October 19, 2000, § 2, Ord. 2893 c.s., eff. October 31, 2002, and § 10, Ord. 3009 c.s. eff. December 6, 2007)

9-1.03 Fees.

Section 108.1 of said California Building Code Appendix Chapter 1 is hereby amended to read as follows:

108.1 Fees.

(a) General. Fees shall be assessed in accordance with the provisions of this section.

(b) Permit Fees. The fee for each permit shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach City Municipal Code.

The determination of value or valuation under any of the provisions of this Code shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finished work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment.

(c) Plan Review Fees. When a plan or other data are required to be submitted by Section 106, of the California Building Code, Appendix Chapter 1 a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 108.1, and are in addition to the permit fees.

The Building Official may modify plan review fees and requirements in accordance with Section 106.

Where plans are incomplete or changed so as to require additional plan review, an additional plan review fee shall be charged at the rate shown in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code.

(d) Expiration of Plan Review. Applications for which no permit is issued within 180 days following the date of application shall expire by limitation, and plans and other data submitted for review may thereafter by returned to the applicant or destroyed by the Building Official. The Building Official may extend the time for action by the applicant for a period not exceeding ninety (90) days on written request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. Application may be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

(e) Investigation Fees—Work without a Permit.

1. Investigation. Whenever any work for which a permit is required by this Code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

2. Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this Code. The minimum investigation fee shall be the same as the minimum fee set forth in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this Code nor from any penalty prescribed by law.

(f) Fee Refunds. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The Building Official may authorize refunding of not more than eighty (80%) percent of the permit fee paid when no work has been done under a permit issued in accordance with this Code.

The Building Official may authorize refunding of not more than eighty (80%) percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.

(§ 1, Ord. 2050 c.s., eff. July 28, 1971, as amended by § 1, Ord. 2246 c.s., eff. July 19, 1978, § 2, Ord. 2308 c.s., eff. May 27, 1981, § 3, Ord. 2663 c.s., eff. July 19, 1992, § 3, Ord. 2753 c.s., eff. January 1, 1996, § 3, Ord. 2834 c.s., eff. July 1, 1999, and § 11, Ord. 3009 c.s., eff. December 6, 2007)

9-1.04 Violations and penalties.

Section 113.4 of said California Building Code Appendix Chapter 1 is hereby amended to read as follows:

113.4 Violation penalties. It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure or cause or permit the same to be done in violation of this Code. The penalty for any violation, upon the conviction of any violation, shall be a fine of not more than One Thousand and no/100ths ($1000.00) Dollars, or imprisonment in a County Jail for a period not exceeding six (6) months, or both such fine and imprisonment.

(§ 2, Ord. 1749 c.s., eff. December 20, 1961, as amended by § 1, Ord. 1886 c.s., eff. August 11, 1965, as renumbered by § 1, Ord. 2050 c.s., eff. July 28, 1971, § 2, Ord. 2076 c.s., eff. September 20, 1972, § 4, Ord. 2663 c.s., eff. July 9, 1992, and § 4, Ord. 2753 c.s., eff. January 1, 1996; repealed by § 4, Ord. 2834 c.s., eff. July 1, 1999, § 3, Ord. 2893 c.s., eff. October 31, 2002, § 12, Ord. 3009 c.s., eff. December 6, 2007)

9-1.05 Fire extinguishing systems.

Section 903 of Chapter 9 of said California Building Code is hereby amended and Section 907.2.10.1.6 of said California Building is hereby added to read as follows:

Section 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies.

Section 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies.

Section 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies.

Section 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies.

Section 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 750 square feet.

Section 903.2.1A Group B. An automatic sprinkler system shall be provided throughout buildings containing a Group B occupancy where one of the following conditions exists:

1. Where a Group B fire area exceeds 750 square feet;
2. Where a Group B fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.2 Group E. Except as provided for in Sections 903.2.2.1 for a new public school campus and 907.2.3.6.1 (fire alarm and detection) for modernization of an existing public school campus building(s), an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas when greater than 750 square feet in area, or located more than one story above grade plane, or where the combined area of all fire areas on all floors, including any mezzanines, exceed 750 square feet.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

Section 903.2.3 Group F. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. Where a Group F fire area exceeds 750 square feet;
2. Where a Group F fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.3.1 Woodworking Operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 750 square feet in area which generate finely divided combustible waste or use finely divided combustible materials.

Section 903.2.5 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area. An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group I-1.

Section 903.2.6 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 750 square feet;
2. Where a Group M fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.8 Group S. An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy where one of the following conditions exists:

1. A Group S fire area exceeds 750 square feet;
2. A Group S fire area is located more than one story above grade plane; or
3. The combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.8.1 Repair Garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings with a fire area containing a repair garage exceeding 750 square feet;
2. Buildings with a repair garage servicing vehicles parked in the basement.

Section 903.2.8.2 Bulk Storage of Tires. Buildings and structures for the storage of tires shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Section 903.2.9 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

Section 903.2.7 Group R and Group U. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R and/or Group U fire area.

Exceptions:

1. Detached Group R-3 and/or Group U accessory buildings not exceeding 750 square feet.

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

Section 903.2.18 Existing Buildings of all Occupancies. In existing buildings, an automatic sprinkler system shall be required throughout the entire building whenever more than a 750 square feet addition and/or an additional story is added to the existing building.

Section 903.3.1.3 NFPA 13D Sprinkler Systems. Where allowed, automatic sprinkler systems in one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three (3) stories above grade plane in height with a separate means of egress shall be installed throughout in accordance with NFPA 13D.

Section 907.2.10.1.6, R-2, R-3, R-3.1, R-4, and I-1 Occupancy Alarm Notification with NFPA 13D Protection Systems.

1. NFPA 13D Alarm Notification:
   a. The fire sprinkler system shall be equipped with a weather-proof horn/strobe located at the front of the structure and/or as near as possible to the front, viewable from the addressed street. It power shall be connected on a kitchen refrigerator circuit or a dedicated tamper proof circuit breaker of sufficient amperage capacity.
   b. If this circuit is not accessible from outside the structure, an additional tamper- and weather-proof disconnect switch shall be provided and located near the fire sprinkler riser.
   c. Automatic fire sprinkler system flow alarm shall be required in-house meeting the same requirement of notification. No inside notification appliances required when flow alarm is interconnected to a multiple station smoke detection systems.

(§ 2, Ord. 1749 c.s., eff. December 20, 1961, as amended by § 1, Ord. 1886 c.s., eff. August 11, 1965, as renumbered by § 1, Ord. 2050 c.s., eff. July 28, 1971; repealed by § 2, Ord. 2076 c.s., eff. September 20, 1972; reenacted by § 3, said Ord. 2076 c.s., as amended by § 2, Ord. 2231 c.s., eff. May 10, 1978, § 3, Ord. 2308 c.s., eff. May 27, 1981, § 1, Ord. 2604 c.s., eff. December 7, 1990, § 1, Ord. 2637 c.s., eff. September 5, 1991, § 5, Ord. 2753 c.s., eff. January 1, 1996, § 1, Ord. 2769 c.s., eff. July 4, 1996, § 5, Ord. 2834 c.s., eff. July 1, 1999, and § 13, Ord. 3009 c.s., eff. December 6, 2007)

9-1.06 Building permit limitation.

Notwithstanding any provisions of this Code to the contrary, every permit issued by the Building Official under the provisions of this code shall expire by limitation and become null and void if the building or work authorized by

such permit is not completed, in accordance with the provisions of this Code, within two (2) years from the date of such permit. Before such work can be recommenced, a new permit shall be first obtained to do so, and the fee therefore shall be the amount required for a new permit for such work, provided (a) no changes have been made and/or will be made in the original plans and specifications for such work; (b) such suspension or abandonment has not exceeded one year; and (c) the building or work authorized by the new permit shall comply with the current code provisions in effect on the date of issuance of such permit. (§ 2, Ord. 1749 c.s., eff. December 20, 1961, as amended by § 1, Ord. 1831 c.s., eff. May 27, 1964, § 1, Ord. 1886 c.s., eff. August 11, 1965, and § 1, Ord. 2042 c.s., eff. March 3, 1971, as renumbered by § 1, Ord. 2050 c.s., eff. July 28, 1971, as amended by § 2, Ord. 2076 c.s., eff. September 20, 1972, § 3, Ord. 2231 c.s., eff. May 10, 1978, and § 4, Ord. 2308 c.s., eff. May 27, 1981; repealed by § 2, Ord. 2476 c.s., eff. October 15, 1987; reenacted by § 5, Ord. 2663 c.s., eff. July 9, 1992, as amended by § 6, Ord. 2753 c.s., eff. January 1, 1996; repealed by § 6, Ord. 2834 c.s., eff. July 1, 1999; amended by § 2, Ord. 2857 c.s., eff. October 19, 2000)

9-1.07 Light, ventilation, and sanitation.

(§ 1, Ord. 2275 c.s., eff. August 22, 1979, as renumbered by § 5, Ord. 2308 c.s., eff. May 27, 1981; repealed by § 2, Ord. 2476 c.s., eff. October 15, 1987; reenacted by § 6, Ord. 2663 c.s., eff. July 9, 1992; repealed by § 7, Ord. 2753 c.s., eff. January 1, 1996; repealed by § 7, Ord. 2834 c.s., eff. July 1, 1999)

9-1.08 Roof covering.

Section 1505 Roofing Requirements of said California Building Code is hereby amended as follows:

The entire roof covering Class "C" of every existing structure where more than twenty-five (25%) percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class "B" as defined in the California Building Code.

Table 1505.1, "Minimum Roof Covering Classification for Types of Construction," of Chapter 15 of the California Building Code is hereby amended as follows:

Table 1505.1. Minimum Roof Covering Classification for Types of Construction. All roof classifications of "C" shall be deleted from Table 1505.1 and replaced by class "B" roof classification.

(§ 2, Ord. 2565 c.s., eff. January 1, 1990, as amended by § 7, Ord. 2663 c.s., eff. July 9, 1992, § 8, Ord. 2753 c.s., eff. January 1, 1996, § 8, Ord. 2834 c.s., eff. July 1, 1999, § 4, 2893 c.s., eff. October 31, 2002, and § 14, Ord. 3009 c.s., eff. December 6, 2007)

9-1.09 Grading permits and fees.

(a) General. Fees shall be assessed in accordance with the provisions of this section.

(b) Plan Review Fees. When a plan or other data are required to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. Said plan review fee shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code. Separate plan review fees shall apply to retaining walls or major drainage structures as required elsewhere in this Code. For excavation and fill on the same site, the fee shall be based on the volume of excavation and fill.

(c) Grading Permit Fees. The fee for each grading permit shall be set as in the current Master Fee Schedule per Section 9-16.01, Chapter 16, Title 9 of the Redondo Beach Municipal Code. Separate permits and fees shall apply to retaining walls or major drainage structures as required elsewhere in this Code. There shall be no separate charge for standard terrace drains and similar facilities. (§ 3, Ord. 2565 c.s., eff. January 1, 1990, as amended by § 8, Ord. 2663 c.s., eff. July 9, 1992, § 9, Ord. 2753 c.s., eff. January 1, 1996, § 9, Ord. 2834 c.s., eff. July 1, 1999, and § 15, Ord. 3009 c.s., eff. December 6, 2007)

9-1.10 Special seismic provisions.

Section 1613.6.1 of the 2007 California Building Code is amended to read as follows:

1613.6.1 Assumption of Flexible Diaphragm.

Add the following text at the end of Section 12.3.1.1 of ASCE 7:

Diaphragms constructed of wood structural panels or untopped steel decking shall also be permitted to be idealized as flexible, provided all of the following conditions are met:

1. Toppings of concrete or similar materials are not placed over wood structural panel diaphragms except for nonstructural toppings no greater than 1-1/2 inches (38 mm) thick.

2. Each line of vertical elements of the lateral-force-resisting system complies with the allowable story drift of Table 12.12-1.
3. Vertical elements of the lateral-force-resisting system are light-framed walls sheathed with wood structural panels rated for shear resistance or steel sheets.
4. Portions of wood structural panel diaphragms that cantilever beyond the vertical elements of the lateral-force-resisting system are designed in accordance with Section 2305.2.5 of the California Building Code.

Exception: In lieu of Section 2305.2.5, flexible diaphragm assumption is permitted to be used for buildings up to two (2) stories in height provided cantilevered diaphragms supporting lateral-force-resisting elements from above does not exceed fifteeen (15%) percent of the distance between lines of lateral-force-resisting elements from which the diaphragm cantilevers nor one-fourth the diaphragm width perpendicular to the overhang.

Section 1613.7 is added to Chapter 16 of the 2007 California Building Code to read as follows:

1613.7 Suspended Ceilings. Minimum design and installation standards for suspended ceilings shall be determined in accordance with the requirements of Chapter 25 of this Code and this subsection.

1613.7.1 Scope. This part contains special requirements for suspended ceilings and lighting systems. Provisions of Section 13.5.6 of ASCE 7 shall apply except as modified herein.

1613.7.2 General. The suspended ceilings and lighting systems shall be limited to six (6′) feet (1,828 mm) below the structural deck unless the lateral bracing is designed by a licensed engineer or architect.

1613.7.3 Design and Installation Requirements.

1613.7.3.1 Bracing at Discontinuity. Positive bracing to the structure shall be provided at changes in the ceiling plane elevation or at discontinuities in the ceiling grid system.

1613.7.3.2 Support for Appendages. Cable trays, electrical conduits and piping shall be independently supported and independently braced from the structure.

1613.7.3.3 Sprinkler Heads. All sprinkler heads (drops) except fire-resistance-rated floor/ceiling or roof/ceiling assemblies, shall be designed to allow for free movement of the sprinkler pipes with oversize rings, sleeves or adaptors through the ceiling tile, in accordance with Section 13.5.6.2.2 (e) of ASCE 7.

Sprinkler heads penetrating fire-resistance-rated floor/ceiling or roof/ceiling assemblies shall comply with Section 712 of this Code.

1613.7.3.4 Perimeter Members. A minimum wall angle size of at least a two (2″) inch (51 mm) horizontal leg shall be used at perimeter walls and interior full height partitions. The first ceiling tile shall maintain three-quarter-inch (19 mm) clear from the finish wall surface. An equivalent alternative detail that will provide sufficient movement due to anticipated lateral building displacement may be used in lieu of the long leg angle subject to the approval of the Superintendent of Building.

1613.7.4 Special Requirements for Means of Egress. Suspended ceiling assemblies located along means of egress serving an occupant load of thirty (30) or more shall comply with the following provisions.

1613.7.4.1 General. Ceiling suspension systems shall be connected and braced with vertical hangers attached directly to the structural deck along the means of egress serving an occupant load of thirty (30) or more and at lobbies accessory to Group A Occupancies. Spacing of vertical hangers shall not exceed two (2′) feet (610 mm) on center along the entire length of the suspended ceiling assembly located along the means of egress or at the lobby.

1613.7.4.2 Assembly Device. All lay-in panels shall be secured to the suspension ceiling assembly with two hold-down clips minimum for each tile within a four (4′) foot (1,219 mm) radius of the exit lights and exit signs.

1613.7.4.3 Emergency Systems. Independent supports and braces shall be provided for light fixtures required for exit illumination. Power supply for exit illumination shall comply with the requirements of Section 1006.3 of this Code.

1613.7.4.4 Supports for Appendage. Separate support from the structural deck shall be provided for all appendages such as light fixtures, air diffusers, exit signs, and similar elements.

Section 1613.8 is added to Chapter 16 of the 2007 California Building Code to read as follows:

1613.8 Seismic Design Provisions for Hillside Buildings.

1613.8.1 Purpose. The purpose of this section is to establish minimum regulations for the design and construction of new buildings and additions to existing buildings when constructing such buildings on or into slopes steeper than one unit vertical in three (3) units horizontal thirty-three and one-third (33.3%) percent. These regulations establish minimum standards for seismic force resistance to reduce the risk of injury or loss of life in the event of earthquakes.

1613.8.2 Scope. The provisions of this section shall apply to the design of the lateral-force-resisting system for hillside buildings at and below the base level diaphragm. The design of the lateral-force-resisting system above the base level diaphragm shall be in accordance with the provisions for seismic and wind design as required elsewhere in this division.

Exception: Non-habitable accessory buildings and decks not supporting or supported from the main building are exempt from these regulations.

1613.8.3 Definitions. For the purposes of this section certain terms are defined as follows:

BASE LEVEL DIAPHRAGM is the floor at, or closest to, the top of the highest level of the foundation.

DIAPHRAGM ANCHORS are assemblies that connect a diaphragm to the adjacent foundation at the uphill diaphragm edge.

DOWNHILL DIRECTION is the descending direction of the slope approximately perpendicular to the slope contours.

FOUNDATION is concrete or masonry which supports a building, including footings, stem walls, retaining walls, and grade beams.

FOUNDATION EXTENDING IN THE DOWNHILL DIRECTION is a foundation running downhill and approximately perpendicular to the uphill foundation.

HILLSIDE BUILDING is any building or portion thereof constructed on or into a slope steeper than one unit vertical in three (3) units horizontal thirty-three and one-third (33.3%) percent. If only a portion of the building is supported on or into the slope, these regulations apply to the entire building.

PRIMARY ANCHORS are diaphragm anchors designed for and providing a direct connection as described in Sections 1613.8.5 and 1613.8.7.3 between the diaphragm and the uphill foundation.

SECONDARY ANCHORS are diaphragm anchors designed for and providing a redundant diaphragm to foundation connection, as described in Sections 1613.8.6 and 1613.8.7.4.

UPHILL DIAPHRAGM EDGE is the edge of the diaphragm adjacent and closest to the highest ground level at the perimeter of the diaphragm.

UPHILL FOUNDATION is the foundation parallel and closest to the uphill diaphragm edge.

1613.8.4 Analysis and Design.

1613.8.4.1 General. Every hillside building within the scope of this section shall be analyzed, designed, and constructed in accordance with the provisions of this division. When the Code-prescribed wind design produces greater effects, the wind design shall govern, but detailing requirements and limitations prescribed in this and referenced sections shall be followed.

1613.8.4.2 Base Level Diaphragm-Downhill Direction. The following provisions shall apply to the seismic analysis and design of the connections for the base level diaphragm in the downhill direction.

1613.8.4.2.1 Base for Lateral Force Design Defined. For seismic forces acting in the downhill direction, the base of the building shall be the floor at or closest to the top of the highest level of the foundation.

1613.8.4.2.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 4.5 for bearing wall and building frame systems. The total base shear shall include the forces tributary to the base level diaphragm including forces from the base level diaphragm.

1613.8.5 Base Shear Resistance-Primary Anchors.

1613.8.5.1 General. The base shear in the downhill direction shall be resisted through primary anchors from diaphragm struts provided in the base level diaphragm to the foundation.

1613.8.5.2 Location of Primary Anchors. A primary anchor and diaphragm strut shall be provided in line with each foundation extending in the downhill direction. Primary anchors and diaphragm struts shall also be provided where interior vertical lateral-force-resisting elements occur above and in contact with the base level diaphragm. The spacing of primary anchors and diaphragm struts or collectors shall in no case exceed thirty (30′) feet (9,144 mm).

1613.8.5.3 Design of Primary Anchors and Diaphragm Struts. Primary anchors and diaphragm struts shall be designed in accordance with the requirements of Section 1613.8.8.

1613.8.5.4 Limitations. The following lateral-force-resisting elements shall not be designed to resist seismic forces below the base level diaphragm in the downhill direction:

1. Wood structural panel wall sheathing,
2. Cement plaster and lath,
3. Gypsum wallboard, and
4. Tension only braced frames.

Braced frames designed in accordance with the requirements of Section 2205.2.2 may be used to transfer forces from the primary anchors and diaphragm struts to the foundation provided lateral forces do not induce flexural stresses in any member of the frame or in the diaphragm struts. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1613.8.6. Base Shear Resistance-Secondary Anchors.

1613.8.6.1 General. In addition to the primary anchors required by Section 1613.8.5, the base shear in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in the base level diaphragm.

Exception: Secondary anchors are not required where foundations extending in the downhill direction spaced at not more than thirty (30′) feet (9,144 mm) on center extend up to and are directly connected to the base level diaphragm for at least seventy (70%) percent of the diaphragm depth.

1613.8.6.2 Secondary Anchor Capacity and Spacing. Secondary anchors at the base level diaphragm shall be designed for a minimum force equal to the base shear, including forces tributary to the base level diaphragm, but not less than 600 pounds per lineal foot (8.76 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four (4′) feet (1,219 mm) on center.

1613.8.6.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.8.8.

1613.8.7 Diaphragms Below the Base Level-Downhill Direction. The following provisions shall apply to the lateral analysis and design of the connections for all diaphragms below the base level diaphragm in the downhill direction.

1613.8.7.1 Diaphragm Defined. Every floor level below the base level diaphragm shall be designed as a diaphragm.

1613.8.7.2 Design Force. Each diaphragm below the base level diaphragm shall be designed for all tributary loads at that level using a minimum seismic force factor not less than the base shear coefficient.

1613.8.7.3 Design Force Resistance-Primary Anchors. The design force described in Section 1613.8.7.2 shall be resisted through primary anchors from diaphragm struts provided in each diaphragm to the foundation. Primary anchors shall be provided and designed in accordance with the requirements and limitations of Section 1613.8.5.

1613.8.7.4 Design Force Resistance-Secondary Anchors.

1613.8.7.4.1 General. In addition to the primary anchors required in Section 1613.8.7.3, the design force in the downhill direction shall be resisted through secondary anchors in the uphill foundation connected to diaphragm struts in each diaphragm below the base level.

Exception: Secondary anchors are not required where foundations extending in the downhill direction, spaced at not more than thirty (30′) feet (9,144 mm) on center, extend up to and are directly connected to each diaphragm below the base level for at least seventy (70%) percent of the diaphragm depth.

1613.8.7.4.2 Secondary Anchor Capacity. Secondary anchors at each diaphragm below the base level diaphragm shall be designed for a minimum force equal to the design force but not less than 300 pounds per lineal foot (4.38 kN/m). The secondary anchors shall be uniformly distributed along the uphill diaphragm edge and shall be spaced a maximum of four (4′) feet (1,219 mm) on center.

1613.8.7.4.3 Design. Secondary anchors and diaphragm struts shall be designed in accordance with Section 1613.8.8.

1613.8.8 Primary and Secondary Anchorage and Diaphragm Strut Design. Primary and secondary anchors and diaphragm struts shall be designed in accordance with the following provisions:

1. Fasteners. All bolted fasteners used to develop connections to wood members shall be provided with square plate washers at all bolt heads and nuts. Washers shall be minimum 3/16-inch (4.8 mm) thick and two (2″) inch (51 mm) square for one-half-inch (12.7 mm) diameter bolts, and one-quarter-inch (6.4 mm) thick and two and one-half (2-1/2″) inch (64 mm) square for five-eighths-inch (15.9 mm) diameter or larger bolts. Nuts shall be wrench tightened prior to covering.
2. Fastening. The diaphragm to foundation anchorage shall not be accomplished by the use of toe-nailing, nails subject to withdrawal, or wood in cross-grain bending or cross-grain tension.
3. Size of Wood Members. Wood diaphragm struts collectors, and other wood members connected to primary anchors shall not be less than three (3″) inch (76 mm) nominal width. The effects of eccentricity on wood members shall be evaluated as required per Item 9.
4. Design. Primary and secondary anchorage, including diaphragm struts, splices, and collectors shall be designed for 125% of the tributary force.
5. Allowable Stress Increase. The one-third allowable stress increase permitted under Section 1605.3.2 shall not be taken when the working (allowable) stress design method is used.
6. Seismic Load Factor. The seismic load factor shall be 1.7 for steel and concrete anchorage when the strength design method is used.
7. Primary Anchors. The load path for primary anchors and diaphragm struts shall be fully developed into the diaphragm and into the foundation. The foundation must be shown to be adequate to resist the concentrated loads from the primary anchors.
8. Secondary Anchors. The load path for secondary anchors and diaphragm struts shall be fully developed in the diaphragm but need not be developed beyond the connection to the foundation.
9. Symmetry. All lateral force foundation anchorage and diaphragm strut connections shall be symmetrical. Eccentric connections may be permitted when demonstrated by calculation or tests that all components of force have been provided for in the structural analysis or tests.
10. Wood Ledgers. Wood ledgers shall not be used to resist cross-grain bending or cross-grain tension.

1613.8.9 Lateral-Force-Resisting Elements Normal to the Downhill Direction.

1613.8.9.1 General. In the direction normal to the downhill direction, lateral-force-resisting elements shall be designed in accordance with the requirements of this section.

1613.8.9.2 Base Shear. In developing the base shear for seismic design, the response modification coefficient (R) shall not exceed 4.5 for bearing wall and building frame systems.

1613.8.9.3 Vertical Distribution of Seismic Forces. For seismic forces acting normal to the downhill direction the distribution of seismic forces over the height of the building using Section 12.8.3 of ASCE 7 shall be determined using the height measured from the top of the lowest level of the building foundation.

1613.8.9.4 Drift Limitations. The story drift below the base level diaphragm shall not exceed 0.005 times the story height. The total drift from the base level diaphragm to the top of the foundation shall not exceed three-quarter-inch (19 mm). Where the story height or the height from the base level diaphragm to the top of the foundation varies because of a stepped footing or story offset, the height shall be measured from the average height of the top of the foundation. The story drift shall not be reduced by the effect of horizontal diaphragm stiffness.

Where code-prescribed wind forces govern the design of the lateral force resisting system normal to the downhill direction, the drift limitation shall be 0.0025 for the story drift and the total drift from the base level diaphragm to the top of the foundation may exceed

three-quarter inch (19 mm) when approved by the Department. In no case, however, shall the drift limitations for seismic forces be exceeded.

1613.8.9.5 Distribution of Lateral Forces.

1613.8.9.5.1 General. The design lateral force shall be distributed to lateral-force-resisting elements of varying heights in accordance with the stiffness of each individual element.

1613.8.9.5.2 Wood Structural Panel Sheathed Walls. The stiffness of a stepped wood structural panel shear wall may be determined by dividing the wall into adjacent rectangular elements, subject to the same top of wall deflection. Deflections of shear walls may be estimated by Section 2305.3.2. Sheathing and fastening requirements for the stiffest section shall be used for the entire wall. Each section of wall shall be anchored for shear and uplift at each step. The minimum horizontal length of a step shall be eight (8′) feet (2,438 mm) and the maximum vertical height of a step shall be two (2′) feet, eight (8″) inches (813 mm).

1613.8.9.5.3 Reinforced Concrete or Masonry Shear Walls. Reinforced concrete or masonry shear walls shall have forces distributed in proportion to the rigidity of each section of the wall.

1613.8.9.6 Limitations. The following lateral force-resisting-elements shall not be designed to resist lateral forces below the base level diaphragm in the direction normal to the downhill direction:

1. Cement plaster and lath,
2. Gypsum wallboard, and
3. Tension-only braced frames.

Braced frames designed in accordance with the requirements of Chapter 22 of this Code may be designed as lateral-force-resisting elements in the direction normal to the downhill direction, provided lateral forces do not induce flexural stresses in any member of the frame. Deflections of frames shall account for the variation in slope of diagonal members when the frame is not rectangular.

1613.8.10 Specific Design Provisions.

1613.8.10.1 Footings and Grade Beams. All footings and grade beams shall comply with the following:

1. Grade beams shall extend at least twelve (12″) inches (305 mm) below the lowest adjacent grade and provide a minimum twenty-four (24″) inch (610 mm) distance horizontally from the bottom outside face of the grade beam to the face of the descending slope.
2. Continuous footings shall be reinforced with at least two (2) No. 4 reinforcing bars at the top and two No. 4 reinforcing bars at the bottom.
3. All main footing and grade beam reinforcement steel shall be bent into the intersecting footing and fully developed around each corner and intersection.
4. All concrete stem walls shall extend from the foundation and reinforced as required for concrete or masonry walls.

1613.8.10.2 Protection Against Decay and Termites. All wood to earth separation shall comply with the following:

1. Where a footing or grade beam extends across a descending slope, the stem wall, grade beam, or footing shall extend up to a minimum eighteen (18″) inches (457 mm) above the highest adjacent grade.

Exception: At paved garage and doorway entrances to the building, the stem wall need only extend to the finished concrete slab, provided the wood framing is protected with a moisture proof barrier.

2. Wood ledgers supporting a vertical load of more than 100 pounds per lineal foot (1.46 kN/m) and located within forty-eight (48″) inches (1,219 mm) of adjacent grade are prohibited. Galvanized steel ledgers and anchor bolts, with or without wood nailers, or treated or decay resistant sill plates supported on a concrete or masonry seat, may be used.

1613.8.10.3 Sill Plates. All sill plates and anchorage shall comply with the following:

1. All wood framed walls, including nonbearing walls, when resting on a footing, foundation, or grade beam stem wall, shall be supported on wood sill plates bearing on a level surface.
2. Power-driven fasteners shall not be used to anchor sill plates except at interior nonbearing walls not designed as shear walls.

1613.8.10.4 Column Base Plate Anchorage. The base of isolated wood posts (not framed into a stud wall) supporting a vertical load of 4000 pounds (17.8 kN) or

more and the base plate for a steel column shall comply with the following:

1. When the post or column is supported on a pedestal extending above the top of a footing or grade beam, the pedestal shall be designed and reinforced as required for concrete or masonry columns. The pedestal shall be reinforced with a minimum of four (4) No. 4 bars extending to the bottom of the footing or grade beam. The top of exterior pedestals shall be sloped for positive drainage.
2. The base plate anchor bolts or the embedded portion of the post base, and the vertical reinforcing bars for the pedestal, shall be confined with two (2) No. 4 or three (3) No. 3 ties within the top five (5″) inches (127 mm) of the concrete or masonry pedestal. The base plate anchor bolts shall be embedded a minimum of twenty (20) bolt diameters into the concrete or masonry pedestal. The base plate anchor bolts and post bases shall be galvanized and each anchor bolt shall have at least two (2) galvanized nuts above the base plate.

1613.8.10.5 Steel Beam to Column Supports. All steel beam to column supports shall be positively braced in each direction. Steel beams shall have stiffener plates installed on each side of the beam web at the column. The stiffener plates shall be welded to each beam flange and the beam web. Each brace connection or structural member shall consist of at least two (2) five-eigths inch (15.9 mm) diameter machine bolts.

Section 1614, 1614.1 and 1614.1.1 are added to Chapter 16 of the 2007 California Building Code to read as follows:

Section 1614 Modification to ASCE 7.

1614.1 General. The text of ASCE 7 shall be modified as indicated in this section.

1614.1.1 ASCE 7, 12.2.3.1, Exception 3. Modify ASCE 7 Section 12.2.3.1 Exception 3 to read as follows:

3. Detached one- and two-family dwellings up to two (2) stories in height of light frame construction.

1614.1.2 ASCE 7, 12.3.1.1. Modify ASCE 7 Section 12.3.1.1 to read as follows:

12.3.1.1 Flexible Diaphragm Condition. Diaphragm constructed of untopped steel decking or wood structural panels are permitted to be idealized as flexible in structures in which the vertical elements are steel or composite steel and concrete braced frames, or concrete, masonry, steel, or composite shear walls. Diaphragms of wood structural panels or untopped steel decks in one- and two-family residential buildings of light-frame construction shall also be permitted to be idealized as flexible.

Flexible diaphragm assumption is permitted to be used for buildings up to two (2) stories in height provided cantilevered diaphragms supporting lateral-force-resisting elements from above does not exceed fifteen (15%) percent of the distance between lines of lateral-force-resisting elements from which the diaphragm cantilevers nor one-fourth the diaphragm width perpendicular to the overhang.

1614.1.3 ASCE 7, Section 12.8.1.1. Modify ASCE 7 Section 12.8.1.1 by amending Equation 12.8-5 as follows:

$$Cs = 0.044\, S_{DS}\, I \geq 0.01 \qquad \text{(Eq. 12.8-5)}$$

1614.1.4 ASCE 7, Table 12.8-2. Modify ASCE 7 Table 12.8-2 by adding the following:

Structure Type	C_t	x
Eccentrically braced steel frames and buckling-restrained braced frames	0.03 (0.0731)[a]	0.75

1614.1.5 ASCE 7, Section 12.8.7. Modify ASCE 7 Section 12.8.7 by amending Equation 12.8-16 as follows:

$$\theta = \frac{P_x \Delta I}{V_x h_{sx} C_d} \qquad (12.8\text{-}16)$$

1614.1.6 ASCE 7, 12.11.2.2.3. Modify ASCE 7 Section 12.11.2.2.3 to read as follows:

12.11.2.2.3 Wood Diaphragms. In wood diaphragms, the continuous ties shall be in addition to the diaphragm sheathing. Anchorage shall not be accomplished by use of toe nails or nails subject to withdrawal nor shall wood ledgers or framing be used in cross-grain bending or cross-grain tension. The diaphragm sheathing shall not be considered effective as providing ties or struts required by this section.

For wood diaphragms supporting concrete or masonry walls, wood diaphragms shall comply with the following:

1. The spacing of continuous ties shall not exceed forty (40′) feet. Added chords of diaphragms may

be used to form subdiaphragms to transmit the anchorage forces to the main continuous crossties.

2. The maximum diaphragm shear used to determine the depth of the subdiaphragm shall not exceed seventy-five (75%) percent of the maximum diaphragm shear.

1614.1.7 ASCE 7, Section 12.12.3. Replace ASCE 7 Section 12.12.3 as follows:

12.12.3 Minimum Building Separation. All structures shall be separated from adjoining structures. Separations shall allow for the maximum inelastic response displacement (Δ_M). Δ_M shall be determined at critical locations with consideration for both translational and torsional displacements of the structure as follows:

$$\Delta_M = C_d \delta_{max} \qquad \text{(Equation 16-45)}$$

where δ_{max} is the calculated maximum displacement at Level x as define in ASCE 7 Section 12.8.4.3.

Adjacent buildings on the same property shall be separated by at least a distance Δ_{MT}, where

$$\Delta_{MT} = \sqrt{(\Delta_{M1})^2 + (\Delta_{M2})^2} \qquad \text{(Equation 16-46)}$$

and Δ_{M1} and Δ_{M2} are the maximum inelastic response displacements of the adjacent buildings.

Where a structure adjoins a property line not common to a public way, the structure shall also be set back from the property line by at least the displacement, Δ_M, of that structure.

Exception: Smaller separations or property line setbacks shall be permitted when justified by rational analysis.

1614.1.8 ASCE 7, 12.12.4. Modify ASCE 7 Section 12.12.4 to read as follows:

12.12.4 Deformation Compatibility for Seismic Design Category D through F. For structures assigned to Seismic Design Category D, E or F, every structural component not included in the seismic force-resisting system in the direction under consideration shall be designed to be adequate for the gravity load effects and the seismic forces resulting from displacement to the design story drift (Δ) as determined in accordance with Section 12.8.6 (see also Section 12.12.1).

Exception: Reinforced concrete frame members not designed as part of the seismic force-resisting system shall comply with Section 21.9 of ACI 318.

Where determining the moments and shears induced in components that are not included in the seismic force-resisting system in the direction under consideration, the stiffening effects of adjoining rigid structural and nonstructural elements shall be considered and a rational value of member and restraint stiffness shall be used.

When designing the diaphragm to comply with the requirements stated above, the return walls and fins/canopies at entrances shall be considered. Seismic compatibility with the diaphragm shall be provided by either seismically isolating the element or by attaching the element and integrating its load into the diaphragm.

Section 1704.1 of the 2007 California Building Code is amended to read as follows:

1704.1 General. Where application is made for construction as described in this section, the owner or the registered design professional in responsible charge acting as the owner's agent shall employ one or more special inspectors to provide inspections during construction on the types of work listed under Section 1704. The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection. These inspections are in addition to the inspections specified in Section 109, Appendix Chapter 1.

Exceptions:

1. Special inspections are not required for work of a minor nature or as warranted by conditions in the jurisdiction as approved by the Building Official.
2. Special inspections are not required for building components unless the design involves the practice of professional engineering or architecture as defined by applicable state statutes and regulations governing the professional registration and certification of engineers or architects.
3. [HCD 1] The provisions of Health and Safety Code Division 13, Part 6 and the California Code of Regulations, Title 25, Division 1, Chapter 3, commencing with Section 3000, shall apply to the

construction and inspection of factory-built housing as defined in Health and Safety Code Section 19971.

Section 1704.4 of the 2007 California Building Code is amended to read as follows:

1704.4 Concrete Construction. The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4.

Exceptions: Special inspection shall not be required for:

1. Isolated spread concrete footings of buildings three stories or less in height that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 MPa).
2. Continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:
   2.1. The footings support walls of light-frame construction;
   2.2. The footings are designed in accordance with Table 1805.4.2; or
   2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 MPa), regardless of the compressive strength specified in the construction documents or used in the footing construction.
3. Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 MPa).
4. Not adopted.
5. Concrete patios, driveways and sidewalks, on grade.

Section 1704.8 of the 2007 California Building Code is amended to read as follows:

1704.8 Pile foundation and connecting grade beams. Special inspections shall be performed during installation and testing of pile foundations as required by Table 1704.8. The approved soils report, required by Section 1802.2, and the documents prepared by the registered design professional in responsible charge shall be used to determine compliance. Special inspections for connecting grade beams shall be in accordance with Section 1704.4.

Sections 1709.1 and 1709.2 of the 2007 California Building Code are amended to read as follows:

1709.1 General. Where required by the provisions of Section 1709.2 or 1709.3 the owner shall employ the registered design professional in responsible charge for the structural design, or another registered design professional designated by the registered design professional in responsible charge for the structural design to perform structural observations as defined in Section 1702.

The owner or owner's representative shall coordinate and call a preconstruction meeting between the registered design professional in responsible charge for the structural design, structural observer, contractor, affected subcontractors and special inspectors. The structural observer shall preside over the meeting. The purpose of the meeting shall be to identify the major structural elements and connections that affect the vertical and lateral load resisting systems of the structure and to review scheduling of the required observations. A record of the meeting shall be included in the report submitted to the building official.

Observed deficiencies shall be reported in writing to the owner's representative, special inspector, contractor and the building official. Upon the form prescribed by the building official, the structural observer shall submit to the building official a written statement at each significant construction stage stating that the site visits have been made and identifying any reported deficiencies which, to the best of the structural observer's knowledge, have not been resolved. A final report by the structural observer which states that all observed deficiencies have been resolved is required before acceptance of the work by the building official.

1709.2 Structural observations for seismic resistance. Structural observations shall be provided for those structures included in Seismic Design Category D, E or F, as determined in Section 1613, where one or more of the following conditions exist:

1. The structure is classified as Occupancy Category III or IV in accordance with Section 1604.5.
2. The height of the structure is greater than seventy-five (75') feet (22,860 mm) above the base.
3. The structure is classified as Occupancy Category I or II in accordance with Section 1604.5 and a lateral design is required for the structure or portion thereof.

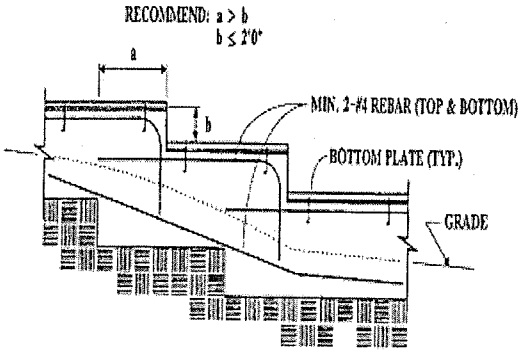
Exception: One-story wood framed Group R-3 and Group U Occupancies less than 2000 square feet in area, provided the adjacent grade is not steeper than one unit vertical in ten (10) units horizontal (ten (10%) percent sloped), assigned to Seismic Design Category D.

4. When so designated by the registered design professional in responsible charge of the design.
5. When such observation is specifically required by the Building Official.

Section 1805.1 of the 2007 California Building Code is amended to read as follows:

1805.1 General. Footings and foundations shall be designed and constructed in accordance with Sections 1805.1 through 1805.9. Footings and foundations shall be built on undisturbed soil, compacted fill material or controlled low-strength material (CLSM). Compacted fill material shall be placed in accordance with Section 1803.5. CLSM shall be placed in accordance with Section 1803.6.

The top surface of footings shall be level. The bottom surface of footings is permitted to have a slope not exceeding one unit vertical in ten (10) units horizontal (ten (10%) percent slope). Footings shall be stepped where it is necessary to change the elevation of the top surface of the footing or where the surface of the ground slopes more than one unit vertical in ten (10) units horizontal (ten (10%) percent slope). This stepping requirement shall also apply to the top surface of grade beams supporting walls. Footings shall be reinforced with four (4) one-half-inch diameter (12.7 mm) deformed reinforcing bars. Two bars shall be place at the top and bottom of the footings as shown in Figure 1805.1.



STEPPED FOUNDATIONS

Figure 1805.1

Table 1805.4.2 of the 2007 California Building Code is amended to read as follows:

Table 1805.4.2
Footings Supporting Walls of Light-Framed Construction [a, b, c, d, e]

Number of Floors Supported by the Footing[f]	Width of Footing (inches)	Thickness of Footing (inches)
1	12	6
2	15	6
3	18	8

For SI: 1 inch =25.4 mm, 1 foot = 304.8 mm

a. Depth of footings shall be in accordance with Section 91.1805.2
b. The ground under the floor is permitted to be excavated to the elevation of the top of the footing.
c. Not adopted.
d. See Section 1908 for additional requirements for footings of structures assigned to Seismic Design Category C, D, E or F.
e. For thickness of foundation walls, see Section 91.1805.5
f. Footings are permitted to support a roof in addition to the stipulated number of floors. Footings supporting roof only shall be as required for supporting one floor.

Section 1805.4.5 of the 2007 California Building Code is hereby deleted and replaced with the phrase "Not adopted."

Section 1805.4.6 of the 2007 California Building Code is hereby deleted and replaced with the phrase "Not adopted".

Section 1805.5 of the 2007 California Building Code is hereby deleted in its entirety.

Section 1805.5 of the 2007 California Building Code is added to read as follows:

1805.5 Foundation walls. Concrete and masonry foundation walls shall be designed in accordance with Chapter 19 or 21.

Section 1908.1 of the 2007 California Building Code is amended to read as shown below and Section 1908.1.17 is added to Chapter 19 of the 2007 California Building Code to read as follows:

1908.1 General. The text of ACI 318 shall be modified as indicated in Sections 1908.1.1 through 1908.1.17.

1908.1.17 ACI 318, Section 14.8. Modify ACI 318 Section 14.8.3 and 14.8.4 replacing equation (14-7), (14-8) and (14-9).

1. Modify equation (14-7) of ACI 318 Section 14.8.3 as follows:

I_{cr} shall be calculated by Equation (14-7), and M_a shall be obtained by iteration of deflections.

$$I_{cr}=\frac{E_s}{E_c}\left(A_s+\frac{P_u}{f_y}\frac{h}{2d}\right)(d-c)^2+\frac{l_w c^3}{3} \qquad (14\text{-}7)$$

and the value E_s/E_c shall not be taken less than 6.

2. Modify ACI 318 Sec. 14.8.4 as follows:

14.8.4 – Maximum out-of-plane deflection, Δ_s, due to service loads, including PΔ effects, shall not exceed $l_c/150$.

If M_a, maximum moment at mid-height of wall due to service lateral and eccentric loads, including PΔ effects, exceed (2/3) M_{cr}, Δ_s shall be calculated by Equation (14-8):

$$\Delta_s=\frac{2}{3}\Delta_{cr}+\frac{M_a-\frac{2}{3}M_{cr}}{M_n-\frac{2}{3}M_{cr}}\left(\Delta_n-\frac{2}{3}\Delta_{cr}\right) \qquad (14\text{-}8)$$

If M_a does not exceed (2/3) M_{cr}, Δs shall be calculated by Equation (14-9):

$$\Delta_s=\left(\frac{M_a}{M_{cr}}\right)\Delta_{cr} \qquad (14\text{-}9)$$

where:

$$\Delta_{cr}=\frac{5M_{cr}l_c^2}{48E_cI_g}$$

$$\Delta_n=\frac{5M_nl_c^2}{48E_cI_{cr}}$$

Section 1908.1 of the 2007 California Building Code is amended to read as shown below and Section 1908.1.18 thru 1908.1.21 is added to Chapter 19 of the 2007 California Building Code to read as follows:

1908.1 General. The text of ACI 318 shall be modified as indicated in Sections 1908.1.1 through 1908.1.21.

1908.1.18 ACI 318, Section 21.4.4.1. Modify ACI 318 Section 21.4.4.1 as follows:

Where the calculated point of contraflexure is not within the middle half of the member clear height, provide transverse reinforcement as specified in ACI 318 Sections 21.4.4.1, Items (a) through (c), over the full height of the member.

1908.1.19 ACI 318, Section 21.4.4. Modify ACI 318 by adding Section 21.4.4.7 as follows:

21.4.4.7—At any section where the design strength, φP_n, of the column is less than the sum of the shears V_e computed in accordance with ACI 318 Sections 21.3.4.1 and 21.4.5.1 for all the beams framing into the column above the level under consideration, transverse reinforcement as specified in ACI 318 Sections 21.4.4.1 through 21.4.4.3 shall be provided. For beams framing into opposite sides of the column, the moment components may be assumed to be of opposite sign. For the determination of the design strength, φP_n, of the column, these moments may be assumed to result from the deformation of the frame in any one principal axis.

1908.1.20 ACI 318, Section 21.7.4. Modify ACI 318 by adding Section 21.7.4.6 as follows:

21.7.4.6—Walls and portions of walls with $P_u > 0.35P_o$ shall not be considered to contribute to the calculated strength of the structure for resisting earthquake-induced forces. Such walls shall conform to the requirements of Section 1631.2, Item 4 ACI 318 Section 21.11.

1908.1.21 ACI 318, Section 21.9.4. Modify ACI 318 section 21.9.4 by adding the following:

Collector and boundary elements in topping slabs placed over precast floor and roof elements shall not be less than three (3") inches (76 mm) or six (6) d_b thick, where d_b is the diameter of the largest reinforcement in the topping slab.

Section 1908.1.15 of the 2007 California Building Code is amended to read as follows:

1908.1.15 ACI 318, Section 22.10. Delete ACI 318, Section 22.10, and replace with the following:

22.10 – Plain concrete in structures assigned to Seismic Design Category C, D, E or F.

22.10.1 – Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

(a) Concrete used for fill with a minimum cement content of two (2) sacks of Portland cement per cubic yard.

(b) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

(c) Plain concrete footings supporting walls are permitted provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

In detached one- and two-family dwellings three (3) stories or less in height and constructed with stud-bearing walls, plain concrete footings with at least two (2) continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

Section 2205.4 is added to Chapter 22 of the 2007 California Building Code to read as follows:

2205.4 Modifications to AISC 341.

2205.4.1 Part I, Structural Steel Building Provisions Modifications.

2205.4.1.1 Part I, Section 13, Special Concentrically Braced Frames (SCBF) Modifications.

2205.4.1.1.1 AISC 341, Part I, 13, Members. Add a new section as follows:

AISC 341, 13.2f – Member Types

The use of rectangular HSS are not permitted for bracing members, unless filled solid with cement grout having a minimum compressive strength of 3000 psi (20.7 MPa) at twenty-eight (28) days. The effects of composite action in the filled composite brace shall be considered in the sectional properties of the system where it results in the more severe loading condition or detailing.

Section 2305.2.5 of the 2007 California Building Code is amended to read as follows:

2305.2.5 Rigid Diaphragms. Design of structures with rigid diaphragms shall conform to the structure configuration requirements of Section 12.3.2 of ASCE 7 and the horizontal shear distribution requirements of Section 12.8.4 of ASCE 7.

Wood structural panel diaphragms shall not be considered as transmitting lateral forces by rotation.

Rigid wood diaphragms are permitted to cantilever past the outermost supporting shear wall (or other vertical resisting element) a length, l, of not more than twenty-five (25′) feet (7,620 mm) or two-thirds of the diaphragm width, w, whichever is smaller. Figure 2305.2.5(2) illustrates the dimensions of l and w for a cantilevered diaphragm.

Section 2305.3.7.1 is added to Chapter 23 of the 2007 California Building Code to read as follows:

2305.3.7.1 Hold-Down Connectors. Hold-down connectors shall be designed to resist shear wall overturning moments using approved cyclic load values or seventy-five (75%) percent of the allowable earthquake load values that do not consider cyclic loading of the product. Connector bolts into wood framing require steel plate washers on the post on the opposite side of the anchorage device. Plate size shall be a minimum of 0.229 inch by three (3″) inches by three (3″) inches (5.82 mm by 76 mm by 76 mm) in size. Hold-downs shall be re-tightened just prior to covering the wall framing.

Section 2305.3.12 is added to Chapter 23 of the 2007 California Building Code to read as follows:

2305.3.12 Quality of Nails. Mechanically driven nails used in wood structural panel shear walls shall meet the same dimensions as that required for hand-driven nails, including diameter, minimum length and minimum head diameter. No clipped head or box nails permitted in new construction. The allowable design value for clipped head nails in existing construction may be taken

at no more than the nail-head-area ratio of that of the same size hand-driven nails.

Sections 2306.3.1, 2306.4.1 and Table 2306.4.1 of the 2007 California Building Code are amended to read as follows:

2306.3.1 Wood Structural Panel Diaphragms. Wood structural panel diaphragms are permitted to resist horizontal forces using the allowable shear capacities set forth in Table 2306.3.1 or 2306.3.2.

2306.4.1. Wood Structural Panel Shear Walls. The allowable shear capacities for wood structural panel shear walls shall be in accordance with Table 2306.4.1. These capacities are permitted to be increased forty (40%) percent for wind design. Wood shear walls shall be constructed of wood structural panels and not less than four (4′) feet by eight (8′) feet (1,219 mm by 2,438 mm), except at boundaries and at changes in framing. Wood structural panel thickness for shear walls shall not be less than three-eighths-inch thick and studs shall not be spaced at more than sixteen (16″) inches on center.

The maximum allowable shear value for three-ply plywood resisting seismic forces is 200 pounds per foot (2.92 kn/m). Nails shall be placed not less than one-half-inch (12.7 mm) in from the panel edges and not less than three-eighths-inch (9.5mm) from the edge of the connecting members for shear greater than 350 pounds per foot (5.11kN/m). Nails shall be placed not less than three-eighths-inch (9.5 mm) from panel edges and not less than one-quarter-inch (6.4 mm) from the edge of the connecting members for shears of 350 pounds per foot (5.11kN/m) or less.

Any wood structural panel sheathing used for diaphragms and shear walls that are part of the seismic-force-resisting system shall be applied directly to framing members.

Exception: Wood structural panel sheathing in a horizontal diaphragm is permitted to be fastened over solid lumber planking or laminated decking, provided the panel joints and lumber planking or laminated decking joints do not coincide.

Table 2306.4.1 of the 2007 California Building Code is hereby deleted in its entirely.

Table 2306.4.1 is added to read as follows:

Table 2306.4.1

Allowable Shear (Pounds Per Foot) For Wood Structural Panel Shear Walls With Framing Of Douglas Fir-Larch Or Southern Pine[a] For Wind Or Seismic Loading[b, h, i, j, l, m, n]

PANEL GRADE	MINIMUM NOMINAL PANEL THICKNESS (inch)	MINIMUM FASTENER PENETRATION IN FRAMING (inches)	ALLOWABLE SHEAR VALUE FOR SEISMIC FORCES PANELS APPLIED DIRECTLY TO FRAMING					ALLOWABLE SHEAR VALUE FOR WIND FORCES PANELS APPLIED DIRECTLY TO FRAMING				
			NAIL (common) or staple size[k]	Fastener spacing at panel edges (inches)				NAIL (common) or staple size[k]	Fastener spacing at panel edges (inches)			
				6	4	3	2[e]		6	4	3	2[e]
Structural I Sheathing	3/8	1-3/8	8d (2-1/2″x0.131″ common)	200	200	200	200	8d (2-1/2″x0.131″ common)	230[d]	360[d]	460[d]	610[d]
		1	1-1/2 16 Gage	116	176	200	200	1-1/2 16 Gage	155	235	310	400
	7/16	1-3/8	8d (2½″x0.131″ common)	255	395	505	670	8d (2-1/2″x0.131″ common)	255[d]	395[d]	505[d]	670[d]
		1	1-1/2 16 Gage	128	195	259	330	1-1/2 16 Gage	170	260	345	440
	15/32	1-3/8	8d (2-1/2″x0.131″ common)	280	430	550	730	8d (2-1/2″x0.131″ common)	280	430	550	730
		1	1-1/2 16 Gage	139	210	281	356	1-1/2 16 Gage	185	280	375	475
		1-1/2	10d (3″x0.148″ common)	340	510	665[f]	870	10d (3″x0.148″ common)	340	510	665[f]	870
Sheathing, plywood siding[g] except Group 5 Species	3/8	1-1/4	6d (2″x0.113″ common)	200	200	200	200	6d (2″x0.113″ common)	200	300	390	510
		1-3/8	8d (2½″x0.131″ common)	200	200	200	200	8d (2-1/2″x0.131″ common)	220[d]	320[d]	410[d]	530[d]
		1	1-1/2 16 Gage	105	158	200	200	1-1/2 16 Gage	140	210	280	360
	7/16	1-3/8	8d (2½″x0.131″ common)	240	350	450	585	8d (2-1/2″x0.131″ common)	240[d]	350[d]	450[d]	585[d]
		1	1-1/2 16 Gage	116	173	233	296	1-1/2 16 Gage	155	230	310	395
	15/32	1-3/8	8d (2½″x0.131″ common)	260	380	490	640	8d (2-1/2″x0.131″ common)	260	380	490	640
		1-1/2	10d (3″x0.148″ common)	310	460	600[f]	770	10d (3″x0.148″ common)	310	460	600[f]	770
		1	1-1/2 16 Gage	128	191	251	323	1-1/2 16 Gage	170	255	335	430
	19/32	1-1/2	10d (3″x0.148″ common)	340	510	665[f]	870	10d (3″x0.148″ common)	340	510	665[f]	870
		1	1-3/4 16 Gage	139	210	281	356	1-3/4 16 Gage	185	280	375	475
			Nail Size (galvanized casing)					Nail Size (galvanized casing)				
	3/8	1-3/8	8d (2-1/2″x0.113″)	160	200	200	200	8d (2-1/2″x0.113″)	160	240	310	410

Notes:
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per foot = 14.5939 N/m.

a. For framing of other species: (1) Find specific gravity for species of lumber in AF&PA NDS. (2) For staples find shear value from table above for Structural I panels (regardless of actual grade) and multiply value by 0.82 for species with specific gravity of 0.42 or greater, or 0.65 for all other species. (3) For nails find shear value from table above for nail size for actual grade and multiply value by the following adjustment factor: Specific Gravity Adjustment Factor = [1-(0.5-SG)], where SG = Specific Gravity of the framing lumber. This adjustment factor shall not be greater than 1.

b. Panel edges backed with 2-inch nominal or thicker framing. Install panels either horizontally or vertically. Space fasteners maximum 6 inches on center along intermediate framing members for 3/8-inch and 7/16-inch panels installed on studs spaced 24 inches on center. For other conditions and panel thickness, space fasteners maximum 12 inches on center on intermediate supports.

c. Three-eighths-inch panel thickness or siding with a span rating of 16 inches on center is the minimum recommended where applied direct to framing as exterior siding.

d. Allowable shear values are permitted to be increased to values shown for 15/32-inch sheathing with same nailing provided (a) studs are spaced a maximum of 16 inches on center, or (b) panels are applied with long dimension across studs.

e. Framing at adjoining panel edges shall be 3 inches nominal or thicker, and nails shall be staggered where nails are spaced 2 inches on center.

f. Framing at adjoining panel edges shall be 3 inches nominal or thicker, and nails shall be staggered where both of the following conditions are met: (1) 10d (3″x0.148″) nails having penetration into framing of more than 1-1/2 inches and (2) nails are spaced 3 inches on center.

g. Values apply to all-veneer plywood. Thickness at point of fastening on panel edges governs shear values.

h. Where panels applied on both faces of a wall and nail spacing is less than 6 inches o.c. on either side, panel joints shall be offset to fall on different framing members, or framing shall be 3-inch nominal or thicker at adjoining panel edges and nails on each side shall be staggered.

i. In Seismic Design Category D, E or F, where shear design values exceed 350 pounds per linear foot, all framing members receiving edge nailing from abutting panels shall not be less than a single 3-inch nominal member, or two 2-inch nominal members fastened together in accordance with Section 2306.1 to transfer the design shear value between framing members. Wood structural panel joint and sill plate nailing shall be staggered in all cases. See Section 2305.3.11 for sill plate size and anchorage requirements.

j. Galvanized nails shall be hot dipped or tumbled.

k. Staples shall have a minimum crown width of 7/16 inch and shall be installed with their crowns parallel to the long dimension of the framing members.

l. For shear loads of normal or permanent load duration as defined by the AF&PA NDS, the values in the table above shall be multiplied by 0.63 or 0.56, respectively.

m. [DSA-SS & OSHPD 1, 2 and 4] Refer to Section 2305.2.4.2, which requires any wood structural panel sheathing used for diaphragms and shear walls that are part of the seismic-force-resisting system to be applied directly to framing members.

n. The maximum allowable shear value for three-ply plywood resisting seismic forces is 200 pounds per foot (2.92 kn/m).

Section 2306.4.5 of the 2007 California Building Code is amended to read as follows:

2306.4.5—Shear Walls Sheathed With Other Materials. Shear wall capacities for walls sheathed with lath, plaster or gypsum board shall be in accordance with Table 2306.4.5. Shear walls sheathed with lath, plaster or gypsum board shall be constructed in accordance with Chapter 25 and Section 2306.4.5.1. Walls resisting seismic loads shall be subject to the limitations in Section 12.2.1 of ASCE 7. The allowable shear values shown in Table 2306.4.5 for material in Category 1 is limited to ninety (90) pounds per foot (1.31 kN/m); materials in Category 2 thru 4 are limited to thirty (30) pound per foot (438 N/m). Shear walls sheathed with lath, plaster or gypsum board shall not be used below the top level in a multi-level building.

Table 2306.4.5 of the 2007 California Building Code is hereby deleted in its entirely.

Table 2306.4.5 of the 2007 California Building Code is added to read as follows:

Table 2306.4.5
Allowable Shear For Wind Or Seismic Forces For Shear Walls Of Lath And Plaster Or Gypsum Board Wood Framed Wall Assemblies

TYPE OF MATERIAL	THICKNESS OF MATERIAL	WALL CONSTRUCTION	FASTENER SPACING[b] MAXIMUM (inches)	SHEAR VALUE[a,e] (plf)		MINIMUM FASTENER SIZE[c,d,j,k,l]
				Seismic[l]	Wind	
1. Expanded metal, or woven wire lath and portland cement plaster	7/8"	Unblocked	6	90	180	No. 11 gage, 1-1/2" long, 7/16" head 16 Ga. Galv. Staple, 7/8" legs
2. Gypsum lath, plain or perforated	3/8" lath and 1/2" plaster	Unblocked	5	30	100	No. 13 gage, 1-1/8" long, 19/64" head, plasterboard nail 16 Ga. Galv. Staple, 1-1/8" long 0.120" Nail, min. 3/8" head, 1-1/4" long
3. Gypsum sheathing	1/2" x 2' x 8'	Unblocked	4	30	75	No. 11 gage, 1-3/4" long, 7/16" head, diamond-point, galvanized 16 Ga. Galv. Staple, 1-3/4" long
	1/2" x 4'	Blocked[f] Unblocked	4 7	30 30	175 100	
	5/8" x 4'	Blocked	4" edge/ 7" field	30	200	6d galvanized 0.120" Nail, min. 3/8" head, 1-3/4" long
4. Gypsum board, gypsum veneer base or water-resistant gypsum backing board	1/2"	Unblocked[f]	7	30	75	5d cooler (1-5/8" lx 0.086") or wallboard 0.120" Nail, min. 3/8" head, 1-1/2" long 16 Gage Staple, 1-1/2" long
		Unblocked[f]	4	30	110	
		Unblocked	7	30	100	
		Unblocked	4	30	125	
		Blocked[g]	7	30	125	
		Blocked[g]	4	30	150	
		Unblocked	8/12[h]	30	60	No. 6- 1-1/4" screws[l]
		Blocked[g]	4/16[h]	30	160	
		Blocked[g]	4/12[h]	30	155	
		Blocked[f, g]	8/12[h]	30	70	
		Blocked[g]	6/12[h]	30	90	
	5/8"	Unblocked[f]	7	30	115	6d cooler (1-7/8" x 0.092") or wallboard 0.120" Nail, min. 3/8" head, 1-3/4" long 16 Gage Staple, 1-1/2" legs, 1-5/8" long
			4	30	145	
		Blocked[g]	7	30	145	
			4	30	175	
		Blocked[g] Two ply	Base ply: 9 Face ply: 7	30	250	Base ply-6d cooler (1-7/8" x 0.092") or wallboard 1-3/4" x 0.120" Nail, min. 3/8" head 1-5/8" 16 Ga. Galv. Staple Face ply-8d cooler (2-3/8" x 0.113") or wallboard 0.120" Nail, min. 3/8" head, 2-3/8" long 15 Ga. Galv. Staple, 2-1/4" long
		Unblocked	8/12[h]	30	70	No. 6- 1-1/4" screws[l]
		Blocked[g]	8/12[h]	30	90	

Notes:
For SI: 1 inch = 25.4 mm, 1 foot =304.8 mm, 1 pound per foot = 14.5939 N/m.

a. These shear walls shall not be used to resist loads imposed by masonry or concrete construction (see Section 2305.1.5). Values shown are for short-term loading due to wind or seismic loading. Walls resisting seismic loads shall be subject to the limitations in Section 12.2.1 of ASCE 7. Values shown shall be reduced 25 percent for normal loading.
b. Applies to fastening at studs, top and bottom plates and blocking.
c. Alternate fasteners are permitted to be used if their dimensions are not less than the specified dimensions. Drywall screws are permitted to substitute for the 5d (1-5/8" x 0.086"), and 6d (1-7/8" x 0.092")(cooler) nails listed above, and No. 6 1-1/4 inch Type S or W screws for 6d (1-7/8" x 0.092")(cooler) nails.
d. For properties of cooler nails, see ASTM C 514.
e. Except as noted, shear values are based on maximum framing spacing of 16 inches on center.
f. Maximum framing spacing of 24 inches on center.
g. All edges are blocked, and edge fastening is provided at all supports and all panel edges.
h. First number denotes fastener spacing at the edges; second number denotes fastener spacing at intermediate framing members.
i. Screws are Type W or S.
j. Staples shall have a minimum crown width of 7/16 inch, measure outside the legs, and shall be installed with their crowns parallel to the long dimension of the framing members.
k. Staples for the attachment of gypsum loath and woven-wire lath shall have a minimum crown width of 3/4 inch, measured outside the legs.
l. This construction shall not be used below the top level of wood construction in a multi-level building.

Section 2308 of the 2007 California Building Code is amended to read as follows:

2308.3.4 Braced Wall Line Support. Braced wall lines shall be supported by continuous foundations.

2308.12.1 Number of Stories. Structures of conventional light-frame construction shall not exceed one story in height in Seismic Design Category D or E.

2308.12.2 Concrete or Masonry. Concrete or masonry walls or masonry veneer shall not extend above the basement.

Exception: Masonry veneer is permitted to be used in the first story above grade plane in Seismic Design Category D, provided the following criteria are met:

1. Type of brace in accordance with Section 2308.9.3 shall be Method 3 and the allowable shear capacity in accordance with Table 2306.4.1 shall be a minimum of 350 plf (5,108 N/m).
2. The bracing of the first story shall be located at each end and at least every twenty-five (25') feet (7,620 mm) o.c. but not less than forty-five (45%) percent of the braced wall line.
3. Hold-down connectors shall be provided at the ends of braced walls for the first floor to foundation with an allowable design of 2,100 pounds (9,341 N).
4. Cripple walls shall not be permitted.
5. Anchored masonry and stone wall veneer shall not exceed five (5") inches (127 mm) in thickness, shall conform to the requirements of Division 14 and shall not extend more than five (5') feet (1,524 mm) above the first story finished floor.

2308.12.4 Braced Wall Line Sheathing. Braced wall lines shall be braced by one of the types of sheathing prescribed by Table 2308.12.4 as shown in Figure 2308.9.3. The sum of lengths of braced wall panels at each braced wall line shall conform to Table 2308.12.4. Braced wall panels shall be distributed along the length of the braced wall line and start at not more than eight (8') feet (2,438 mm) from each end of the braced wall line. Panel sheathing joints shall occur over studs or blocking. Sheathing shall be fastened to studs, top and bottom plates and at panel edges occurring over blocking. Wall framing to which sheathing used for bracing is applied shall be nominal two (2") inch wide [actual one and one-half (1-1/2") inch (38 mm)] or larger members, spaced a maximum of sixteen (16") inches on center. Nailing shall be minimum 8d common placed three-eighths inches from panel edges and spaced not more than six (6") inches on center, and twelve (12") inches on center along intermediate framing members.

Braced wall panel construction types shall not be mixed within a braced wall line.

Braced wall panels required by Section 2308.12.4 may be eliminated when all of the following requirements are met:

1. One story detached Group U occupancies not more than twenty-five (25') feet in depth or length.
2. The roof and three (3) enclosing walls are solid sheathed with one-half-inch nominal thickness wood structural panels with 8d common nails placed three-eighths inches from panel edges and spaced not more than six (6") inches on center along all panel edges and twelve (12") inches on center along intermediate framing members. Wall openings for doors or windows are permitted provided a minimum four (4') foot wide wood structural braced panel with minimum height to length ratio of 2 to 1 is provided at each end of the wall line and that the wall line be sheathed for fifty (50%) percent of its length.

2308.12.5 Attachment of sheathing. Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.12.4 or Table 2304.9.1. Wall sheathing shall not be attached to framing members by adhesives.

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum twenty-four (24") inches (6,096 mm) on center with four (4) 8d nails per leg (total eight (8) 8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum twenty-four (24") inch (6,096 mm) intervals along the top plate of discontinuous vertical framing.

Table 2308.12.4
Wall Bracing in Seismic Design Categories D and E
(Minimum Length of Wall Bracing per each 25 Linear Feet of Braced Wall Line [a])

Condition	Sheathing Type[b]	$S_{DS} < 0.50$	$0.50 \leq S_{DS} < 0.75$	$0.75 \leq S_{DS} \leq 1.00$	$S_{DS} > 1.00$
One Story	G-P[c]	10 feet 8 inches	14 feet 8 inches	18 feet 8 inches	25 feet 0 inches
	S-W	5 feet 4 inches	8 feet 0 inches	9 feet 4 inches	12 feet 0 inches

Notes:
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

a. Minimum length of panel bracing of one face of the wall for S-W sheathing shall be at least 4'-0" long or both faces of the wall for G-P sheathing shall be at least 8'-0" long; h/w ratio shall not exceed 2:1. For S-W panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half the tabulated value but the h/w ratio shall not exceed 2:1 and design for uplift is required.
b. G-P = gypsum board, portland cement plaster or gypsum sheathing boards; S-W = wood structural panels.
c. Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates and, where occurring, at blocking:
For 1/2-inch gypsum board, 5d (0.113 inch diameter) cooler nails at 7 inches on center;
For 5/8-inch gypsum board, No 11 gage (0.120 inch diameter) cooler nails at 7 inches on center;
For gypsum sheathing board, 1-3/4 inches long by 7/16-inch head, diamond point galvanized nails at 4 inches on center;
For gypsum lath, No. 13 gage (0.092 inch) by 1-1/8 inches long, 19/64-inch head, plasterboard at 5 inches on center;
For Portland cement plaster, No. 11 gage (0.120 inch) by 11/2 inches long, 7/16- inch head at 6 inches on center.
d. S-W sheathing shall be 15/32" thick nailed with 8d nails, at 6:6:12.

Plan Requirements.

1. The lateral force resisting system of the building shall be clearly shown on the foundation and framing plans.
2. Sufficient elevations and detail cross-references for all shear-walls, frames, etc. shall be clearly shown on the plans.

(§ 10, Ord. 2753 c.s., eff. January 1, 1996, as amended by § 10, Ord. 2834 c.s., eff. July 1, 1999, § 3, Ord. 2857 c.s., eff. October 19, 2000, and § 16, Ord. 3009 c.s., eff. December 6, 2007)

9-1.11 Residential parking standards.

(a) Garage Doors.

(1) Single-Family Dwellings. Doors of enclosed private garages for single-family dwellings shall be a minimum of eight (8′) feet in width for each single parking space, and a minimum of sixteen (16′) feet in width for a standard two (2) car garage.

(2) Multi-Family Dwellings. Doors of enclosed private garages or common parking garages for all multi-family dwellings shall be a minimum of eight (8′) feet in width for a single parking space, and a minimum of sixteen (16′) feet in width for a standard two (2) car garage.

(b) Vertical Clearance for Garages. The vertical clearance for any entrance to a garage or for any overhead obstruction within any type of garage shall be not less than eighty-eight (88″) inches. Over-the-hood storage cabinets may encroach into a required parking space when located a minimum of four (4′) feet above the floor, and projecting not more than four (4′) feet into the required nineteen (19′) foot parking space depth. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.12 Construction noise.

(a) All construction activity shall be prohibited, except between hours of 7:00 a.m. and 6:00 p.m. on Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays and between the hours of 9:00 a.m. and 5:00 p.m. on Saturdays. No construction activity shall be permitted on Sundays, or the days on which the holidays designated as Memorial Day, the Fourth of July, Labor Day, Thanksgiving Day, Christmas Day, and New Year's Day are observed.

(b) In the case of an emergency, the Building Officer may issue a permit for construction activity for periods during which construction activity is prohibited by subsection (a) of this section. Such permit shall be issued for only the period of the emergency. Where feasible, the Building Officer shall notify the residential occupants within 300 feet of any emergency construction activity of the issuance of any permit authorized by this subsection.

(c) If the Building Officer should determine that the peace, comfort, and tranquility of the occupants of residential property will not be impaired because of the location or nature of the construction activity, the Building Officer may issue a permit for construction activity for periods during which construction activity is prohibited by subsection (a) of this section.

(d) For purposes of this section, "construction activity" shall mean the erection, excavation, demolition, alteration, or repair of any building.

(e) Exemption. This section shall not be applicable to minor repairs or routine maintenance of residential dwelling units. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.13 Vibration.

The operation or permitting the operation of any device which creates vibration which is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 m) from the source if on a public space or public right-of-way, shall be prohibited. For the purposes of this section, "vibration perception threshold" shall mean the minimum ground or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or the visual observation of moving objects. The perception threshold shall be presumed to be .001 "g's" in the frequency range from zero to thirty (30) Hz and .003 "g's" in the frequency range between thirty (30) and 100 Hz. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.14 Stormwater and urban runoff pollution control.

(a) All development shall be in conformance with the stormwater standards of the State of California as implemented by Chapter 7 of Title 5 of the Redondo Beach Municipal Code (Stormwater and Urban Runoff Pollution Control Regulations), the Stormwater Pollution Mitigation Guidelines for Development Projects and the most recent standards of the Regional Water Quality Control Board pursuant to the Standard Urban Stormwater Mitigation Plan. Such development shall conform to any amendment to, or re-issuance of these State, Federal and Municipal standards.

(b) All development on the first row of lots adjacent to the beach that is not exempt from the requirement to obtain a Coastal Development Permit pursuant to Section 10-5.2208(a) of this Code shall be considered a "priority project" pursuant to Section 5-7.210 of the Redondo Beach Municipal Code and therefore subject to preparation and implementation of an Urban Stormwater Mitigation Plan pursuant to the provisions contained in Chapter 7, Title 5 of the Redondo Beach Municipal Code.

(c) All development shall be designed to minimize the creation of impervious surfaces, and, to the maximum extent possible, to reduce directly-connected impervious area on the site. Setback areas should remain permeable (vegetated, porous pavement, crushed gravel, etc.) where feasible. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.15 Construction site defined.

For purposes of this chapter, a construction site is defined as any site for which a building or demolition permit has been issued, except any single-family residence undergoing remodeling and which is inhabited during remodeling. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.16 Fencing of construction sites.

Every holder of a building permit or demolition permit shall completely enclose by fencing the construction site which is the subject of the permit prior to the start of demolition or construction, provided, however, the Chief Building Officer or his or her designee may waive this requirement whenever the terrain, size of the lot, location of neighboring lots, scope of construction or demolition or one or more other factors make it infeasible or unnecessary to completely enclose the construction site by fencing. Any waiver of this provision shall be in writing. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.17 Storage of construction materials.

Every holder of a building permit or demolition permit shall be required to prevent the storage of construction materials on the public right-of-way unless the written permission of the City Engineer or his or her designee is obtained. Such permission shall be granted only if no other feasible alternative exists to the use of the public right-of-way and upon such conditions as the City Engineer or his or her designee may prescribe to eliminate or reduce any adverse impacts from the storage of construction materials on the public right-of-way. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.18 Removal of litter.

Every holder of a building permit or demolition permit shall provide for the removal of all litter on the construction site which is the subject of the permit at the close of each day on which there is construction activity. As used in this section, "litter" shall include, but not be limited to, all waste matter ordinarily carried on or about the person, including beverage containers and closures, packaging, wrappers, wastepaper, newspapers, and magazines; discarded tar paper, insulation wrappers, cement bags, nails, nail boxes and any construction material container or wrapper. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.19 Trash receptacles.

The Chief Building Officer or his or her designee shall have the authority to require trash bins or trash receptacles to be placed and maintained on construction sites as necessary. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.20 Access to construction site.

Every holder of a building permit or demolition permit shall provide unobstructed access to all portable toilets, temporary power poles and the building under construction. For purposes of this section "unobstructed access" shall mean access unimpeded by debris, construction equipment or materials. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.21 Maintenance of public ways, streets and sidewalks.

Every holder of a building permit or demolition permit shall maintain all public ways, streets and sidewalks free from construction material, equipment, and construction debris. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.22 Protection of pedestrians.

Whenever, during the course of construction or demolition, any sidewalk is removed or damaged, the holder of the building permit or the demolition permit for the subject construction or demolition shall provide a replacement walkway and any barricades necessary, as determined by the City Engineer or his or her designee, to protect pedestrians from vehicular traffic. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.23 Blocking driveways.

Every holder of a building permit or a demolition permit for construction or demolition shall prevent all construction equipment, machinery, trailers and sheds from blocking any driveway, sidewalk or alley or any means of ingress or egress from or to any public or private property. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.24 Portable toilets.

Every holder of any building permit or demolition permit shall prevent the placement of any portable toilets in the public right-of-way unless the written permission of the City Engineer or his or her designee has been obtained. Such permission shall be granted only when the terrain, size of the lot, scope of construction or demolition or one or more other factors make it infeasible to place said portable toilets on the construction site. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.25 Construction information.

Every holder of a Building Department Permit including any single-family residence undergoing remodeling and which is inhabited during remodeling shall post a highly visible, yellow, eleven (11") inch by seventeen (17") inch sign posted conspicuously at the work site on a street facing window, garage, front door or construction

fence. Lamination for waterproofing will be required if the sign is posted in a position that exposes the sign to inclement weather. The sign will contain the job address, a description of work, the names of the individual(s) or firm responsible for the construction or demolition, an emergency contact telephone number for the individual(s) or firm responsible for the construction or demolition, the construction or demolition start date, the Building and Police Department contact numbers, the legal construction days and hours, the noise, parking and site maintenance requirements, the permit issuance date and permit number. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.26 Protection from sandblasting, painting or stucco.

Every holder of a building permit or a sandblasting permit shall protect through the erection of plastic cloth or other barrier approved in writing by the Chief Building Officer or his or her designee, contiguous properties from over spray, dust or other materials that may damage those properties or objects on those properties during sandblasting, painting or stucco application. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.27 Disruption of traffic.

Whenever any activity on any construction site requires vehicular traffic on any street under the jurisdiction of the City to be interrupted, halted, or re-routed no such vehicular traffic shall be interrupted, halted, or re-routed unless the holder of the permit for the construction or demolition on said site obtains the written permission of the City Engineer or his or her designee. Said permission shall be granted whenever the terrain, size of the lot, location of neighboring lots, scope of construction or demolition or one or more other factors make it necessary to temporarily interrupt, halt or re-route vehicular traffic adjacent to the construction site. The City Engineer or his or her designee may require the presence of flagmen to direct traffic, appropriate warning or directional signs and other measures necessary to provide safe traffic flow. (§ 17, Ord. 3009 c.s., eff. December 6, 2007)

9-1.28 Construction notification.

The contractor or owner is required to send a notification letter to all the apartment units, condominiums, or house addresses located on the ten (10) adjacent properties to the construction. The postage paid notification letters are required to be submitted to the Building and Safety Department for mailing fourteen (14) days prior to the commencing of demolition or construction. The notification letter will include the following information: the name and address of contractor and owner, the contact telephone number for contractor and owner, the job address, a description of work, and the approximate construction start date. This notification letter would apply only to building permits with a valuation listed at Fifty Thousand and no/100ths ($50,000.00) Dollars or more, and to all demolition permits. The Building and Safety Department will provide a list of all the apartment units, condominiums, or house addresses located on the ten (10) adjacent properties the contractor/owner is required to notify. The contractor/owner is required to notify the five (5) adjacent properties surrounding the construction site, as well as the three (3) properties directly across the street, and two (2) further properties, notified from an optional four (4) properties, with frontage on the same street as the permitted construction. In the case of a property located on a street corner, the contractor/owner is required to notify the three (3) adjacent properties surrounding the construction site, as well as the five (5) properties located across the two (2) intersecting streets, and the two (2) remaining properties (notified from an optional four (4) properties) with frontage on the same street as the permitted construction. For construction sites not meeting either condition listed above, the Building Department will assign the ten (10) required properties to be notified. (§ 17, Ord. 3009 c.s., eff. December 6, 2007, as amended by § 2, Ord. 3027 c.s., eff. December 18, 2008)

Redondo Beach Fire Department

Chapter 9 – Fire Alarm Systems; Annual Fire Alarm Testing

Section 3-4.107, Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.107. Fire Alarm Systems. Subchapter 907.9.5 of Chapter 9 of Part IX of the California Fire Code as adopted by this article is hereby amended to add subsection 907.9.5 (a) as follows:

Sec. 907.9.5 (a). Annual Fire Alarm Maintenance, Inspection and Testing. Fire alarm systems must be certified by a fire alarm testing agency holding a C-10 (electrical) and C-61 (low voltage) state contractor's licenses in accordance with NFPA 72. Every owner of a fire alarm system subject to this subsection must provide the City Fire Department with certification issued by said licensed fire alarm testing agency verifying that all components of the fire alarm systems are operative and have been tested according to National Fire Protection Association standards. Fire alarm systems shall be serviced whenever:

1. A false alarm occurs for an unknown reason or reasons;
2. The fire alarm is activated by fire;
3. The system is in "trouble" condition"

Redondo Beach Fire Department

Chapter 9 – Fire Protection Systems: NFPA 13D Alarm Notification

Section 3-4.107.1 of Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.107.1. NFPA 13D Alarm Notification. Amend Chapter 9 of the California Fire Code to read as follows:

Section 907.2.11.2.3 R-2, R-3, R3.1, R-4, and I-1 occupancy alarm notification with NFPA 13D protection systems:

a. The Fire Sprinkler System shall be equipped with a weather proof Horn/Strobe located at the front of the structure and/or as near as possible to the front, viewable from the addressed street. Its power shall be connected on a kitchen refrigerator circuit or a dedicated tamper proof circuit breaker of sufficient amperage capacity.

b. If this circuit is not accessible from outside the structure, an additional tamper and weather proof disconnect switch shall be provided and located near the fire sprinkler riser.

c. Automatic fire sprinkler system flow alarm shall be required in-house meeting the same requirement of notification. No inside notification appliances required when flow alarm is interconnected to a multiple station smoke detection systems."

Redondo Beach Fire Department

Chapter 33 – Fireworks and Pyrotechnic Special Effects

Section 3-4.105, Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"The use and discharge of fireworks as defined in the California Fire Code is hereby prohibited in the City of Redondo Beach. Chapter 33 of said California Fire Code is hereby amended to read as follows:

Chapter 33. Exception. Nothing contained in this chapter shall be construed to prohibit the use of fireworks by railroads or other transportation agencies or the Police or Fire Departments when such fireworks are used for signal purposes, for illumination, or for the training of employees by such agencies. Neither shall the provisions of this article prohibit the use and sale of blank cartridges to be used for an exhibit, show, play, theater, signal for ceremonial purposes, signal in athletic or sports events, or by acknowledged military organizations."

Section 3-4.106, Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.106. Exemptions. In accordance with Chapter 33 of the Fire Code, fireworks and the possession, manufacture storage, handling and use are prohibited. Supervised public displays of fireworks may be exempted from the prohibition of Section 3-4.105 of this article by permission of the City Council on the basis that such permission is granted after a review and report from the Fire Chief that such display will be performed by a licensed operator in a manner which is not hazardous to people or property."

Redondo Beach Fire Department

Chapter 9 – Automatic Fire Sprinkler Systems

***Note: The City of Redondo Beach's fire sprinkler ordinance has been in effect since July 1992, and has been recorded with the State of California, Building Standards Commission.**

For purposes of clarification, the fire sprinkler requirements apply to those buildings undergoing remodel / tenant improvements under the following conditions:

1. *Additions exceeding 750 square feet.*
2. *Addition of a second floor or room above ground level.*
3. *Additions where combined area on all floors and mezzanines exceed 750 square feet.*
4. *Change of occupancy classification to an assembly use occupancy (A-1 through A-5 classification, CFC 2010), or classification change of any other occupancy exceeding 750 square feet.*

Section 3-4.111, of Article1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec 3-4.111 Fire extinguishing systems. Section 903 of Chapter 9 of the California Fire Code is hereby amended as follows:

Section 903.2.1.1 Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies.

Section 903.2.1.2 Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies.

Section 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies.

Section 903.2.1.4 Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies.

Section 903.2.1.5 Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes and other accessory use areas in excess of 750 square feet.

Section 903.2.1.2 Group B. An automatic sprinkler system shall be provided throughout buildings containing a Group B occupancy where one of the following conditions exists:

1. Where a Group B fire area exceeds 750 square feet;
2. Where a Group B fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.3 Group E. Except as provided for in Sections 903.2.3.1 for a new public school campus and 907.2.3.7 (fire alarm and detection) for modernization of an existing public school campus building(s), an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas when greater than 750 square feet in area, or located more than one story above grade plane, or where the combined area of all fire areas on all floors, including any mezzanines, exceed 750 square feet.
2. Throughout every portion of educational buildings below the level of exit discharge.
3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in exempt amounts are used or stored.

Section 903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. Where a Group F fire area exceeds 750 square feet;
2. Where a Group F fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.4.1 Woodworking operations. An automatic sprinkler system shall be provided throughout all Group F occupancy fire areas that contain woodworking operations in excess of 750 square feet in area which generate finely divided combustible waste or use finely divided combustible materials.

Section 903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area. An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group I-1.

Section 903.2.7 Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. Where a Group M fire area exceeds 750 square feet;
2. Where a Group M fire area is located more than one story above grade plane; or
3. Where the combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.8 Group R and Group U. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R and/or Group U fire area.

Exceptions:

1. Detached Group R-3 and/or Group U accessory buildings not exceeding 750 square feet. An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

Section 903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S occupancy where one of the following conditions exists:

1. A Group S fire area exceeds 750 square feet;
2. A Group S fire area is located more than one story above grade plane; or
3. The combined area of all fire areas on all floors, including any mezzanines, exceeds 750 square feet.

Section 903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406, as shown:

1. Buildings with a fire area containing a repair garage exceeding 750 square feet.
2. Buildings with a repair garage servicing vehicles parked in the basement.

Section 903.2.9.2 Bulk storage of tires. Buildings and structures for the storage of tires shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Section 903.2.10 Group S-2. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 or where located beneath other groups.

Section 903.2.18 Existing buildings of all occupancies. In existing buildings, an automatic sprinkler system shall be required throughout the entire building whenever more than a 750 square feet addition and/or an additional story is added to the existing building.

Section 903.3.1.3 NFPA 13D sprinkler systems. Where allowed, automatic sprinkler systems in one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories above grade plane in height with a separate means of egress shall be installed throughout in accordance with NFPA 13D."

Redondo Beach Fire Department

Chapter 9 – Fire Protection Systems: Standpipes

Section 3-4.110 of Article 1, Chapter 4, Title 3 of the Redondo Beach Municipal Code is hereby amended to read as follows:

"Sec. 3-4.110. Fire standpipes system. Section 905.4, Chapter 9 of the California Fire Code adopted by this article is hereby amended to add subsection 905.4 (7) as follows:

Sec. 905.4 (7). Other locations. When all portions of a building cannot be reached by means of a normal route of travel with 150 feet of fire hose extended from a fire apparatus parked on a public way or fire access road, or with 100 feet of hose extended from a standpipe as required by this section, additional standpipe connections shall be installed as needed to provide such access. The distances from a hose connection shall be measured along the path of travel. "Alternative materials and methods" (Section 104.9) may be allowed under the discretion of the Fire Chief."